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November 6, 2014

Mr. Chris Black
EPA Project Coordinator
U.S. Environmental Protection Agency, Region 5
77 West Jackson Blvd.
Corrective Action Section, LU-9J
Chicago, IL 60604-3590

Subject: 2014 Third Quarter Progress Report, Former Warner Electric Clutch and Brake Facility, Roscoe, Illinois (RCRA-05-2013-0005)

Dear Mr. Black:

This progress report documents the results of groundwater monitoring activities at the former Warner Electric Clutch and Brake facility (Warner) in Roscoe, Illinois following the third quarter monitoring in 2014. This report is provided in accordance with the Amended Administrative Order on Consent (AAOC) between Dana Companies LLC (Dana) and the United States Environmental Protection Agency Region 5 (USEPA), dated April 17, 2013. Further, this report supports the USEPA letter of June 17, 2014, which found that the project has successfully completed construction of the remedy, which is designed to achieve long term protection of human health and the environment (CA550 – event code).

Overall, the monitoring continues to show results consistent with past sampling events. On-site long term monitoring wells show chlorinated volatile organic compound (CVOC) concentrations below the long term cleanup criteria. Two source area wells (MW-103 and MW-104) where TCE concentrations increased during the second quarter sampling event, showed much lower concentrations during the third quarter as the oxidation reduction potential (ORP) and dissolved oxygen levels remained low. Continued quarterly sampling is needed at these wells. More importantly, long term monitoring wells at and near the facility property boundary, as well as those along Edgemere Terrace, continue to show concentrations below the intermediated cleanup goals and in most cases below the long term cleanup goals.

Background

Dana conducted remediation activities at the Warner site under an Administrative Order on Consent (AOC) between the USEPA and Dana, dated December 28, 1989. During most of the time the AOC was in place, remediation was accomplished through the capture and treatment of affected groundwater near the Rock River, approximately 1.25 miles downgradient from the Warner facility (Figure 1). However, the system became increasingly inefficient and ineffective as concentrations of hazardous constituents, primarily trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE), decreased over time. By 2007, influent concentrations had decreased to a level below the National Pollution Discharge Elimination System (NPDES) permitted effluent limits, and the system no longer provided any substantive remedial benefit.

At this point, Dana approached the USEPA and requested an amendment to the AOC to refocus remedial activities to the Warner facility where residual impacts remained. As part of this effort, Dana developed the 2007 Work Plan that employed enhanced reductive dechlorination (ERD) and soil vapor extraction (SVE) to address residual subsurface impacts at the facility, and groundwater monitoring to document the success of remedial efforts. In 2009, following revisions to address USEPA comments, a final version of the Work Plan was approved by the USEPA.

In 2010, the USEPA issued a Statement of Basis outlining historic remedial efforts at the site and revised the planes of performance for long-term remediation at the site.

To expedite remediation of the facility, Dana voluntarily undertook the remedial efforts outlined in the Work Plan prior to the promulgation of the revised AOC. In April 2010, an ERD program, consisting of 300 injection points was implemented and the SVE system was brought on-line. The SVE system operated until September 2011, when influent sampling showed the system had reduced concentrations by a factor of nearly 9,000x and little rebound was noted following system shutdown. In 2013, when groundwater levels rose following a drought, TCE concentrations in the source area increased. To address this, a supplemental ERD program, consisting of 39 injection points, was conducted in 2013. Following the supplemental ERD program, CVOC concentrations in groundwater returned to levels well below the intermediate cleanup criteria.

Groundwater Monitoring

Since 2009, groundwater monitoring has been conducted quarterly at a series of 19 monitoring wells in accordance with the 2009 Work Plan. Figures 1 and 2 depict the overall location of the project and the position of the monitoring wells relative to the facility and the Rock River.

During the week of September 22 to 26, 2014, Dana collected quarterly groundwater samples from the 19 monitoring wells. As in the past, samples were collected using low-flow sampling techniques with a bladder pump. Stabilization was accomplished with field readings of pH, specific conductance, temperature, dissolved oxygen, and ORP. Following stabilization, laboratory-supplied sample containers were filled directly from the pump discharge without filtration. Samples were stored on ice prior to delivery to the PACE Analytical Services, Inc., (PACE) for laboratory analysis of the site-related volatile organic compounds (VOCs) and total chromium. Quality control samples included field duplicates and rinse blanks (10 percent of the samples collected), trip blanks (one per cooler), laboratory method blanks, and surrogate spike samples.

Tables 1 through 4 present tabulated summaries of the field and laboratory analysis. Figures 3 through 22 present time concentration graphs for TCE and cis-1,2-DCE. Attachment A contains the laboratory analytical report. Following are pertinent observations regarding the results and trends noted on the figures and tables.

On-site Source Area Wells MW-101 through MW-107 (Table 1, Figures 3 through 9):

- Wells MW-101 and MW-102 showed low concentrations of TCE that were within historic post-injection concentrations.
- Wells MW-103 and MW-104, where increases in TCE concentrations were reported in the second quarter, showed over 50 percent decrease in concentrations 34.1 and 99.2 µg/L, respectively in the third quarter. ORP (-91 and -69 mVolts) and dissolved oxygen (0.1 to 0.04 mg/L) remained low, reflecting conditions that remain suitable for reductive dechlorination.
- Well MW-105 showed low concentrations of both TCE and cis-1,2-DCE (less than 15 µg/L). Vinyl chloride was again elevated at this well during the second quarter sampling event (29.2 µg/L). However, as the aquifer returns to aerobic conditions, it is anticipated that vinyl chloride will undergo aerobic oxidation or cometabolism to decrease concentrations below the long term cleanup criteria. Vinyl chloride has not been detected in the downgradient wells on Hononegah Road or Edgemere Terrace. Table 1 and Figure 7 also show that the TCE concentration increase observed in early 2013 (with TCE concentrations up to 355 µg/L in well MW-103) was reflected with concentrations no higher than 51 µg/L in MW-105. This demonstrates a strong degree of natural attenuation immediately down gradient of the source area between MW-103 and MW-105.
- Wells MW-106 and MW-107 continue to show trace to low TCE concentrations (less than 15 µg/L) with stable conditions.

- Routine monitoring in these wells over the past four to six years show that they are clearly prepared for remediation by long-term MNA.

On-site Long-term Monitoring Wells - LTMW-01, -02, -03, and -03A (Table 2, Figures 10 through 13):

- Wells LTMW-01 and LTMW-02 meet the long-term cleanup criteria for all CVOCS.
- Wells LTMW-03 (a shallow monitoring well) and LTMW-03A (a deep monitoring well) have concentrations near the long-term cleanup criteria for TCE and cis-21,2-DCE. However, the vinyl chloride concentrations of 11.2 and 4.1 µg/L, respectively remain above the long term cleanup criteria (2 µg/L). The presence of vinyl chloride reflects reductive dechlorination. As the aquifer returns to aerobic conditions, it is anticipated that vinyl chloride will undergo aerobic oxidation or cometabolism to decrease concentrations below the long term cleanup criteria within the next several monitoring events.
- Quarterly monitoring results and trends in these wells over the past four years show that these wells are clearly ready for remediation by long-term MNA.

Off-site Long-term monitoring Wells on Hononegah Road - LTMW-04, -05, -06, -07 (Table 3, Figures 14 through 18):

- The wells along Hononegah Road continue to show stable conditions. Figure 14 depicts the long term TCE concentration trend at this location, using both the original well, N1-60, which had to be abandoned in 2005, as well as the new long term monitoring wells installed in 2009 (LTMW-04 through -07). As Figure 14 illustrates, there has been a dramatic reduction in TCE concentration over time. In the late 1980s TCE concentrations ranged from 1,000 to 1,400 µg/L (these high concentrations are not shown on the figure in order to maintain a useful scale for depicting current concentrations). In the 1990s, TCE concentrations decreased to levels below 500 µg/L. From 2000 to 2005, TCE concentrations continued to fall to levels below 50 µg/L where they remain today. Given this long term stable condition, less frequent (semi-annual) monitoring of these wells is recommended. Less frequent monitoring is particularly applicable at this location since these wells are only used to judge long term concentration trends (as opposed to the source area or Edgemere Terrace, where monitoring results may be used to trigger more active remedial efforts).
- Figures 15 and 18 show that TCE concentrations in wells LTMW-04 and LTMW-07 near the western and eastern boundary of the zone of affected groundwater, respectively, have low TCE concentrations (<10 µg/L at LTMW-04 and <0.050 at LTMW-07). This reflects the shrinking of the area of affected groundwater margins.
- Wells LTMW-05 and LTMW-06 showed stable TCE concentrations 10.6 and 33.5 µg/L, respectively, reflecting conditions near the center of the zone of affected groundwater.

Off-site Long-term Monitoring Wells along Edgemere Terrace - LTMW-08, -09, -10, -11 (Table 4, Figures 19 through 22):

- The wells along Edgemere Terrace continue to show stable conditions, with all 4 wells reporting TCE at concentrations below the intermediate cleanup criteria for groundwater to surface water discharge (25 µg/L). Based on the AAOC these conditions show that the groundwater pump and treat remediation system should remain shut down.
- Wells LTMW-08 and LTMW-11, near the western and eastern boundary of the zone of affected groundwater, respectively, continue to reflect minimal impact with TCE concentrations (less than 4.5 µg/L), below the long-term cleanup criteria. As with wells LTMW-04 and LTMW-07 on Hononegah Road, this again reflects shrinking of the margins of the area of affected groundwater.
- Wells LTMW-09 and LTMW-10, located near the center of the zone of affected groundwater, showed slightly higher TCE concentrations (5.0 and 15.3 µg/L, respectively). These concentrations are well below the intermediate groundwater to surface water discharge criteria.

Letter of Transmittal

Attention: Mr. Christopher Black Date: November 5, 2014
Environmental Scientist

Address USEPA Region 5
77 West Jackson Blvd. LU-9J
Chicago, IL 60604

Project references: Former Warner Electric, Roscoe, IL Project number: 60316733.001

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REMARKS:

SIGNED:



James A. Buss, P.G.

Conclusions

Dana has conducted quarterly groundwater sampling at 19 monitoring wells associated with the Warner facility for the last 4.75 years. Results continue to show that remedial efforts conducted at the source area have been successful with substantial reduction in the concentration of CVOCs, the hazardous constituents reported at the facility. The increase in TCE concentrations was observed in source area wells MW-103 and MW-104 during the second quarter was short lived as conditions in the aquifer remain favorable for reductive dechlorination. AECOM anticipates concentrations will stabilize or decrease during the next several monitoring events. In addition, all on-site long term monitoring wells are near or below the long term cleanup criteria. These results show that the project is well prepared for remediation by MNA.

Wells along Hononegah Road (LTMW-04, -05, -06, and -07) continue to show stable conditions. Dana previously requested a reduction in the sampling frequency from quarterly to semi-annual for these wells. Wells along Edgemere Terrace near the Rock River (LTMW-08, -09, -10, and -11) continue to meet the intermediate cleanup criteria for groundwater to surface water discharge. Based on this, the groundwater pump and treat remediation system will remain in standby mode.

Dana and AECOM respectfully request your concurrence that reducing the sample frequency at the long term monitoring wells along Hononegah Road (LTMW-04, -05, -06, and -07) from quarterly to semi-annual is appropriate.

Please do not hesitate to contact me at (608) 828-8201 if you have any questions or comments on this letter or the attached figures or tables.

Sincerely,



James A. Buss, P.G
Project Manager

Tables:

- Table 1 – Summary of Source Area Monitoring Well Sampling Results
- Table 2 – Summary of On-site Long-term Monitoring Well Sampling Results
- Table 3 – Summary of Hononegah Road Long-term Monitoring Well Sampling Results
- Table 4 – Summary of Edgemere Terrace Long-term Monitoring Well Sampling Results

Figures:

- Figure 1 – Site Location Map
- Figure 2 – Monitoring Well Location Plan
- Figure 3 – MW-101 CVOC Concentration Trend
- Figure 4 – MW-102 CVOC Concentration Trend
- Figure 5 – MW-103 CVOC Concentration Trend
- Figure 6 – MW-104 CVOC Concentration Trend
- Figure 7 – MW-105 CVOC Concentration Trend
- Figure 8 – MW-106 CVOC Concentration Trend
- Figure 9 – MW-107 CVOC Concentration Trend
- Figure 10 – LTMW-01 CVOC Concentration Trend
- Figure 11 – LTMW-02 CVOC Concentration Trend
- Figure 12 – LTMW-03 CVOC Concentration Trend
- Figure 13 – LTMW-03A CVOC Concentration Trend
- Figure 14 – Long Term TCE Concentration Trend at Hononegah Road
- Figure 15 – LTMW-04 CVOC Concentration Trend

Figure 16 – LTMW-05 CVOC Concentration Trend
Figure 17 – LTMW-06 CVOC Concentration Trend
Figure 18 – LTMW-07 CVOC Concentration Trend
Figure 19 – LTMW-08 CVOC Concentration Trend
Figure 20 – LTMW-09 CVOC Concentration Trend
Figure 21 – LTMW-10 CVOC Concentration Trend
Figure 22 – LTMW-11 CVOC Concentration Trend

Attachment:

Attachment 1 – September 2014 Laboratory Analytical Report

TABLES

Table 1
Source Area Monitoring Well Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters						Inorganics				Volatile Organic Compounds							
		Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH Std. Units	Spec. Cond. μmhos/cm	ORP mV	Dis. Oxygen mg/L	Dis. Iron μg/L	Manganese μg/L	Nitrate mg/L	Sulfate mg/L	1,1,1-TCA μg/L	1,1-DCA μg/L	PCE μg/L	TCE μg/L	cis-1,2-DCE μg/L	trans-1,2-DCE μg/L	Vinyl Chloride μg/L
Intermediate Groundwater Cleanup Goal - For Source Area Monitoring Wells⁽¹⁾																			
MW-101	9/16/2008	25.59	728.29	14.0	6.65	840	311	2.0	NM	NM	NM	<1.0	<1.0	<1.0	35.7	3	<1.0	<1.0	
	9/26/2008	NM ⁽²⁾	NM ⁽²⁾	NM	NM	NM	NM	NM	NM	NM	NM	NA	NA	NA	NA	NA	NA	NA	
	10/8/2008	26.04	727.84	14.6	6.24	2,280	-569	1.5	327,000	5,440	<0.40	29.3	<1.0	1.4	<1.0	134	45.7	<1.0	<1.0
	11/6/2008	26.65	727.23	13.9	7.12	940	-130	1.0	35,700	863	0.73	13.2	<1.0	<1.0	<1.0	7.0	<1.0	<1.0	<1.0
	11/24/2008	27.00	726.88	13.3	7.71	825	-255	0.2	14,700	273	0.51	11.6	<1.0	<1.0	<1.0	12.9	3.2	<1.0	<1.0
	12/15/2008	27.25	726.63	12.9	7.82	788	-273	0.2	12,600	126	<0.40	9.5	<1.0	<1.0	<1.0	6.4	1.3	<1.0	<1.0
	3/10/2010	27.55	726.33	13.7	7.40	724	-128	0.8	3,230	5.7	NM	NM	<1.0	<1.0	<1.0	16.6	6.4	<1.0	<1.0
	5/27/2010	26.96	726.92	15.0	7.22	1127	-152	1.6	40,100	792	NM	5.2	5.6	<1.0	<1.0	40.8	8.1	<1.0	<1.0
	7/1/2010	27.12	726.76	14.7	7.10	740	-10	0.1	7,690	132	NM	11.1	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<1.0
	7/29/2010	26.95	726.93	17.9	7.83	817	-290	0.1	7,870	136	NM	NM	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0
	8/31/2010	26.55	727.33	16.5	7.69	787	-249	0.0	6,030	160	NM	NM	<1.0	<1.0	<1.0	2.9	<1.0	<1.0	<1.0
	9/24/2010	27.08	726.80	16.2	7.69	783	-256	0.1	5,860	149	NM	14.2	<1.0	<1.0	<1.0	2.8	<1.0	<1.0	<1.0
	11/4/2010	27.79	726.09	14.3	7.54	711	-164	1.0	4,010	189	NM	NM	<1.0	<1.0	<1.0	2.8	<1.0	<1.0	<1.0
	11/29/2010	28.23	725.65	13.0	7.54	730	-147	0.7	3,140	174	NM	NM	<1.0	<1.0	<1.0	2.5	<1.0	<1.0	<1.0
	12/20/2010	28.48	725.40	13.9	7.43	712	-129	1.6	2,820	126	NM	16.6	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<1.0
	3/2/2011	28.13	725.75	14.2	7.43	716	-145	0.9	NM	NM	NM	NM	<0.9	<0.75	<0.45	1.6	<0.83	<0.89	<0.18
	7/7/2011	28.08	725.80	17.2	7.61	759	-148	0.8	NM	NM	NM	NM	<0.9	<0.75	<0.45	1.7	<0.83	<0.89	<0.18
	9/23/2011	28.79	725.09	28.8	7.44	712	-132	2.4	NM	NM	NM	NM	<0.9	<0.75	<0.45	1.6	<0.83	<0.89	<0.18
	12/21/2011	29.14	724.74	15.8	7.39	665	-120	3.1	NM	NM	NM	NM	<0.9	<0.75	<0.45	1.5	<0.83	<0.89	<0.18
	3/6/2012	29.5	724.38	15.2	7.47	692	-74	0.6	NM	NM	NM	NM	<0.9	<0.75	<0.45	1.5	<0.83	<0.89	<0.18
	6/7/2012	29.96	723.92	14.8	7.46	716	-125	2.0	NM	NM	NM	NM	<0.9	<0.75	<0.45	1.6	<0.83	<0.89	<0.18
	9/27/2012	32.63	721.25	14.9	7.35	788	-95	4.1	NM	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18
	12/20/2012	32.22	721.66	14.9	7.33	795	-38	4.6	NM	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18
	3/9/2013	31.64	722.24	14.4	7.35	726	-16	4.2	NM	NM	NM	NM	<0.9	<0.75	<0.45	0.50 J	<0.83	<0.89	<0.18
	5/20/2013	27.7	726.18	15.2	7.31	725	-54	3.5	NM	NM	NM	NM	<0.44	<0.28	<0.47	4.6	<0.42	<0.37	<0.18
	8/27/2013	26.7	727.18	17.2	7.39	741	-57	3.7	NM	NM	NM	NM	<0.44	<0.28	<0.47	4.3	<0.42	<0.37	<0.18
	12/11/2013	28.8	725.08	15.3	7.19	718	5	5.2	NM	NM	NM	NM	<0.44	<0.28	<0.47	12.8	<0.42	<0.37	<0.18
	3/11/2014	29.39	724.49	15.2	7.24	725	-74	4.0	NM	NM	NM	NM	0.58 J	0.49 J	<0.47	22.6	0.90 J	<0.37	<0.18
	6/25/2014	28.09	725.79	16.8	7.26	733	23	4.6	NM	NM	NM	NM	0.68 J	0.55 J	<0.50	24.3	1.9	<0.26	<0.18
	9/24/2014	28.25	725.63	15.9	7.28	763	-17	5.2	NM	NM	NM	NM	<0.50	0.53 J	<0.50	26.8	3.6	<0.26	<0.18
MW-102	9/16/2008	25.40	728.32	14.0	6.49	854	331	2.0	NM	NM	NM	NM	1.8	<1.0	<1.0	80.7	14.9	<1.0	<1.0
	9/26/2008, S ⁽³⁾	NM	NM	15.6	6.96	855	270	8.8	NM	NM	NM	NM	2.3	1	<1.0	106 ⁽⁵⁾	17.1	<1.0	<1.0
	9/26/2008, D ⁽⁴⁾	NM	NM	15.2	6.97	855	263	7.9	NM	NM	NM	NM	2.6	1.2	<1.0	128	21.8	<1.0	<1.0
	10/8/2008	25.93	727.79	14.5	6.9	1012	-284	1.8	1,230	953	<0.40	22.7	2.1	<1.0	<1.0	100	16.2	<1.0	<1.0
	11/6/2008	26.51	727.21	14.4	6.97	858	-205	0.5	2,470	1,570	<0.40	12.1	1	<1.0	<1.0	75.4	11.5	<1.0	<1.0
	11/24/2008	26.85	726.87	13.1	7.07	837	-229	0.3	6,300	810	<0.40	9.6	<1.0	<1.0	<1.0	43.7	11.7		

Table 1
Source Area Monitoring Well Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Inorganics			Volatile Organic Compounds							
		Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH Std. Units	Spec. Cond. μmhos/cm	ORP mV	Dis. Oxygen mg/L	Dis. Iron μg/L	Dis. Manganese μg/L	Nitrate mg/L	Sulfate mg/L	1,1,1-TCA μg/L	1,1-DCA μg/L	PCE μg/L	TCE μg/L	cis-1,2-DCE μg/L	trans-1,2-DCE μg/L	Vinyl Chloride μg/L
Intermediate Groundwater Cleanup Goal - For Source Area Monitoring Wells ⁽¹⁾																			
MW-102 continued	7/7/2011	27.90	725.82	17.6	7.42	750	-51	1.8	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	2.1	< 0.83	< 0.89	< 0.18
	9/23/2011	28.68	725.04	15.7	7.32	703	-42	2.8	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	2.3	< 0.83	< 0.89	< 0.18
DUP-02	12/21/2011	29	724.72	15.8	7.36	642	-75	2.1	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	3.5	< 0.83	< 0.89	< 0.18
	3/6/2012	29.5	724.22	15.1	7.50	655	-55	0.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	4.1	< 0.83	< 0.89	< 0.18
DUP-02	6/7/2012	29.84	723.88	14.5	7.38	665	-50	0.6	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	3.2	< 0.83	< 0.89	< 0.18
	9/27/2012	31.50	722.22	14.7	7.53	691	-120	0.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	0.8 J	< 0.83	< 0.89	< 0.18
DUP-02	9/27/2012	31.50	722.22	14.7	7.53	691	-120	0.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	0.76 J	< 0.83	< 0.89	< 0.18
DUP-02	12/20/2012	32.05	721.67	14.9	7.43	736	-81	1.1	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	0.67 J	< 0.83	< 0.89	< 0.18
DUP-02	12/20/2012	32.05	721.67	14.9	7.43	736	-81	1.1	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	0.64 J	< 0.83	< 0.89	< 0.18
DUP-02	3/9/2013	31.49	722.23	14.6	7.34	710	-29	2.3	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	6	< 0.83	< 0.89	< 0.18
DUP-02	3/9/2013	31.49	722.23	14.6	7.34	710	-29	2.3	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	6.1	< 0.83	< 0.89	< 0.18
DUP-02	5/20/2013	27.58	726.14	15.1	7.33	692	-41	1.0	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	6.5	0.65 J	< 0.37	< 0.18
DUP-02	5/20/2013	27.58	726.14	15.1	7.33	692	-41	1.0	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	8.1	0.69 J	< 0.37	< 0.18
DUP-02	8/27/2013	26.55	727.17	16.2	7.23	721	-117	2.2	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	13.9	0.60 J	< 0.37	< 0.18
DUP-02	8/27/2013	26.55	727.17	16.2	7.23	721	-117	2.2	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	13.5	0.71 J	< 0.37	< 0.18
DUP-02	12/11/2013	28.61	725.11	15.6	7.23	688	-6	1.7	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	6.9	2	< 0.37	< 0.18
DUP-02	3/12/2014	29.23	724.49	13.3	7.26	701	-87	1.5	NM	NM	NM	NM	< 0.44	0.35 J	< 0.47	25.7	4.1	< 0.37	< 0.18
DUP-02	3/12/2014	29.23	724.49	13.3	7.26	701	-87	1.5	NM	NM	NM	NM	< 0.44	0.38 J	< 0.47	26.9	4.3	< 0.37	< 0.18
DUP-02	6/25/2014	27.94	725.78	19.2	7.15	739	58	2.8	NM	NM	NM	NM	0.57 J	0.37 J	< 0.50	36.2	4.5	< 0.26	< 0.18
DUP-02	6/25/2014	27.94	725.78	19.2	7.15	739	58	2.8	NM	NM	NM	NM	0.71 J	0.39 J	< 0.50	35.6	4.3	< 0.26	< 0.18
DUP-02	9/24/2014	28.07	725.65	16.4	7.27	736	50	4.0	NM	NM	NM	NM	< 0.50	< 0.24	< 0.50	10.9	1.1	< 0.26	< 0.18
DUP-02	9/24/2014	28.07	725.65	16.4	7.27	736	50	4.0	NM	NM	NM	NM	< 0.50	< 0.24	< 0.50	10.6	0.87 J	< 0.26	< 0.18
MW-103	9/16/2008	25.4	728.28	14.3	6.65	864	344	2.0	NM	NM	NM	NM	1.3	< 1.0	< 1.0	132	23.1	< 1.0	< 1.0
MW-103	9/26/2008	NM	NM	14.2	6.93	867	243	8.7	NM	NM	NM	NM	< 5.0	< 5.0	< 5.0	230	39.9	< 5.0	< 5.0
MW-103	10/8/2008	25.96	727.72	14.1	6.88	984	-93	3.9	969	758	2.3	22.6	1.3	< 1.0	< 1.0	149	23.3	< 1.0	< 1.0
MW-103	11/6/2008	26.57	727.11	14.4	6.89	906	-200	1.2	2,440	1,340	0.41	12.2	1.1	< 1.0	< 1.0	120	19.7	< 1.0	< 1.0
MW-103	11/24/2008	26.86	726.82	13.4	6.88	948	-244	0.3	2,770	1,170	< 0.40	7.3	< 1.0	< 1.0	< 1.0	78.2	23.3	< 1.0	< 1.0
MW-103	12/15/2008	27.27	726.41	13.5	7.14	774	-223	0.2	3,240	512	< 0.40	4.4	< 1.0	< 1.0	< 1.0	62.0	44.8	< 1.0	< 1.0
MW-103	3/9/2010	27.40	726.28	13.8	7.19	729	-59	0.7	276	443	NM	NM	< 1.0	< 1.0	< 1.0	40.6	10.7	< 1.0	< 1.0
MW-103	5/27/2010	26.82	726.86	15.8	7.01	837	-175	0.3	5,070	462	NM	4	< 1.0	< 1.0	< 1.0	1.9	51.1	< 1.0	< 1.0
MW-103	7/1/2010	27.03	726.65	15.0	6.85	763	-6	0.1	4,180	326	NM	5.1	< 1.0	< 1.0	< 1.0	3.2	28.6	< 1.0	< 1.0
MW-103	7/29/2010	26.90	726.78	18.8	7.29	759	-222	0.4	3,230	233	NM	NM	< 1.0	< 1.0	< 1.0	11.3	14.5	< 1.0	< 1.0
MW-103	8/30/2010	26.41	727.27	18.2	7.18	726	-175	0.2	2,720	219	NM	NM	< 1.0	< 1.0	< 1.0	11.3	6.4	< 1.0	< 1.0
MW-103	9/24/2010	26.90	726.78	16.6	7.28	721	-270	0.2	1,880	202	NM	13.7	< 1.0	< 1.0	< 1.0	13.0	3.9	< 1.0	< 1.0
MW-103																			

Table 1
Source Area Monitoring Well Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters						Inorganics			Volatile Organic Compounds							
		Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH Std. Units	Spec. Cond. μmhos/cm	ORP mV	Dis. Oxygen mg/L	Dis. Iron μg/L	Dis. Manganese μg/L	Nitrate mg/L	Sulfate mg/L	1,1,1-TCA μg/L	1,1-DCA μg/L	PCE μg/L	TCE μg/L	cis-1,2-DCE μg/L	trans-1,2-DCE μg/L
Intermediate Groundwater Cleanup Goal - For Source Area Monitoring Wells⁽¹⁾																	100	
MW-104	9/16/2008	25.47	728.23	14.3	6.79	842	337	2	NM	NM	NM	1.4	1	<1.0	172	27.4	<1.0	<1.0
	9/26/2008 (S*)	NM	NM	14.8	6.87	868	166	8.4	NM	NM	NM	<5.0	<5.0	<5.0	356	59.3	<5.0	<5.0
	9/26/2008 (D*)	NM	NM	14.5	6.80	858	176	7.8	NM	NM	NM	<5.0	<5.0	<5.0	256	41.2	<5.0	<5.0
	10/8/2008	26.01	727.69	14.1	7.13	849	226	8.3	1,250	47.7	5.9	22.2	<2.0	<2.0	157	21.7	<2.0	<2.0
	11/6/2008	26.62	727.08	14.6	6.82	954	-127	3.2	<100	830	1.3	22.2	<2.5	<2.5	150	51.4	<2.5	<2.5
	11/24/2008	26.95	726.75	12.0	6.64	893	-158	0.9	644	950	<0.40	12.6	1.8	<1.0	126.0	51	<1.0	<1.0
	12/15/2008	27.34	726.36	12.6	7.03	759	-201	0.5	557	800	<0.40	10.5	1.5	<1.0	109.0	34.9	<1.0	<1.0
	3/9/2010	27.49	726.21	13.9	7.13	751	-23	0.5	196	474	NM	NM	<1.0	<1.0	61.1	20.9	<1.0	<1.0
	5/27/2010	26.91	726.79	15.0	7.00	843	-180	0.2	2,840	602	NM	6.7	5.5	<1.0	15.7	112	<1.0	<1.0
	7/1/2010	27.1	726.60	15.2	6.83	760	-6	0.1	3,570	280	NM	8.5	<1.0	<1.0	2.8	68.3	<1.0	<1.0
DUP-01	7/29/2010	26.88	726.82	18.3	7.19	787	-212	0.5	3,240	292	NM	<1.0	<1.0	<1.0	8.3	31.2	<1.0	<1.0
	7/29/2010	26.88	726.82	18.3	7.19	787	-212	0.5	3,140	285	NM	NM	<1.0	<1.0	7.6	32.2	<1.0	<1.0
	8/30/2010	26.55	727.15	18.8	7.06	785	-163	0.2	2,720	315	NM	NM	<1.0	<1.0	9.4	12.4	<1.0	<1.0
	9/24/2010	26.94	726.76	16.6	7.24	758	-253	0.3	2,330	297	NM	13.9	<1.0	<1.0	11.4	5.8	<1.0	<1.0
	11/4/2010	27.67	726.03	14.8	7.33	698	-129	0.2	2,220	289	NM	NM	<1.0	<1.0	14.6	3.3	<1.0	<1.0
DUP-02	11/29/2010	28.15	725.55	13.2	7.31	719	-119	0.6	2,010	268	NM	NM	<1.0	<1.0	14.0	2.0	<1.0	<1.0
	12/20/2010	28.34	725.36	14.3	7.23	703	-83	2.7	1,820	258	NM	19.3	<1.0	<1.0	15.0	3.0	<1.0	<1.0
	3/22/2011	28.08	725.62	14.3	7.29	677	-122	0.2	NM	NM	NM	<0.9	<0.75	<0.45	1.4	<0.83	<0.89	<0.18
	3/22/2011	28.08	725.62	14.3	7.29	677	-122	0.2	NM	NM	NM	<0.9	<0.75	<0.45	1.3	<0.83	<0.89	<0.18
	7/7/2011	27.94	725.76	18.1	7.30	780	-54	0.7	NM	NM	NM	<0.9	<0.75	<0.45	11.7	<0.83	<0.89	<0.18
	9/23/2011	28.7	725.00	16.3	7.23	725	-70	1.8	NM	NM	NM	<0.9	<0.75	<0.45	8.8	<0.83	<0.89	<0.18
	12/21/2011	29.06	724.64	15.9	7.09	722	-55	2.2	NM	NM	NM	<0.9	<0.75	<0.45	3.8	<0.83	<0.89	<0.18
	3/6/2012	29.59	724.11	14.9	7.28	734	-56	0.3	NM	NM	NM	<0.9	<0.75	<0.45	2.0	<0.83	<0.89	<0.18
	6/7/2012	29.88	723.82	16.0	7.23	705	-7	0.5	NM	NM	NM	<0.9	<0.75	<0.45	2.4	<0.83	<0.89	<0.18
	9/27/2012	31.59	722.11	14.8	7.27	719	-75	0.0	NM	NM	NM	<0.9	<0.75	<0.45	0.93 J	<0.83	<0.89	<0.18
	12/20/2012	32.12	721.58	14.9	7.28	734	-50	0.0	NM	NM	NM	<0.9	<0.75	<0.45	0.80 J	<0.83	<0.89	<0.18
	3/9/2013	31.53	722.17	14.7	7.26	719	4	0.4	NM	NM	NM	<0.9	<0.75	<0.45	5.3	<0.83	<0.89	<0.18
	5/20/2013	27.61	726.09	15.1	7.18	719	23	3.5	NM	NM	NM	<0.44	0.58 J	<0.47	218	38	<0.37	<0.18
	8/27/2013	26.67	727.03	17.2	7.19	740	76	4.6	NM	NM	NM	0.59 J	<0.28	<0.47	143	7.8	<0.37	<0.18
	10/23/2013	28.03	725.67	15.2	6.88	1030	-103	0.3	NM	NM	NM	<0.44	<0.28	<0.47	<0.36	13.8	<0.37	<0.18
	11/25/2013	28.41	725.29	15.8	7.05	754	-128	0.1	NM	NM	NM	<0.44	0.41 J	<0.47	2	65.4	<0.37	<0.18
	12/11/2013	28.74	724.96	15.7	7.09	706	-112	0.2	NM	NM	NM	<0.44	0.35 J	<0.47	2.4	49.3	<0.37	<0.18
	3/11/2014	29.31	724.39	15.1	7.28	728	-119	0.2	NM	NM	NM	<0.44	<0.28	<0.47	9.6	10.3	<0.37	<0.18
	6/25/2014	28.01	725.69	16.2	7.15	826	-60	0.6	NM	NM	NM	0.72 J	2.1	<0.50	201	61.3	<0.26	<0.18
	9/24/2014	28.18	725.52	15.8	7.19	753	-69	0.04	NM	NM	NM	<0.50	<0.24	<0.50	99.2	10.8	<0.26	<0.18
MW-105	3/10/2010	25.33	725.86	13.1	7.06	780	-61	NM	<100	655	NM	NM	<1.0	1.8	91.5	42.8	<1.0	2.6
	5/28/2010	25.03	726.16	16.0	7.26	3040	-480	0.3	421,000	4720	NM	1						

Table 1
Source Area Monitoring Well Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Inorganics			Volatile Organic Compounds							
		Water Depth	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	Dis. Iron	Dis. Manganese	Nitrate	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Intermediate Groundwater Cleanup Goal - For Source Area Monitoring Wells⁽¹⁾																			
MW-106	3/10/2010	27.42	725.78	13.1	7.16	752	176	7.0	<100	158	NM	<1.0	<1.0	5.2	1.1	<1.0	<1.0		
	5/28/2010	26.87	726.33	13.7	7.19	720	49	2.0	<100	59.8	NM	16.4	<1.0	<1.0	5.3	2.2	<1.0	<1.0	
	7/1/2010	27.02	726.18	13.8	6.52	616	-5	2.0	582	516	NM	8.3	<1.0	<1.0	3.6	<1.0	<1.0	<1.0	
	7/29/2010	26.85	726.35	18.8	7.30	735	-175	0.3	2,130	359	NM	<1.0	<1.0	1.8	<1.0	<1.0	<1.0		
DUP-01	8/25/2010	26.36	726.84	15.2	6.99	740	-94	1.1	2,370	234	NM	<1.0	<1.0	6.4	2.6	<1.0	<1.0		
	8/25/2010	26.36	726.84	15.2	6.99	740	-94	1.1	2,250	229	NM	<1.0	<1.0	6.4	2.7	<1.0	<1.0		
	9/24/2010	26.95	726.25	15.1	7.15	773	-196	0.8	2,290	190	NM	5.8	<1.0	<1.0	6.7	2.9	<1.0	<1.0	
	11/4/2010	27.64	725.56	14.5	7.26	739	-118	0.9	2,500	250	NM	<1.0	<1.0	5.1	15.7	<1.0	<1.0		
	11/29/2010	28.10	725.10	13.9	7.26	766	-114	0.9	2,840	286	NM	<1.0	<1.0	1.4	3.8	<1.0	<1.0		
	12/21/2010	28.34	724.86	12.9	7.22	751	-84	1.8	2,400	309	NM	20.7	1.3	2.1	2.6	4.2	<1.0		
	3/17/2011	28.10	725.10	13.8	7.23	785	-90	0.5	NM	NM	NM	<0.9	<0.75	<0.45	1.2	<0.83	<0.89	<0.18	
	7/7/2011	27.94	725.26	14.3	7.19	778	-47	0.9	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18	
	9/26/2011	28.68	724.52	13.9	7.08	761	-6	1.1	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18	
	12/21/2011	28.99	724.21	13.1	7.07	752	-48	1.6	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18	
	3/6/2012	29.53	723.67	13.9	7.26	786	-85	NM	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18	
	6/6/2012	29.79	723.41	15.5	7.12	777	13	0.4	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18	
	9/27/2012	31.49	721.71	15.3	7.12	744	2	0.1	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18	
	12/20/2012	32.00	721.20	13.7	7.15	766	96	0.1	NM	NM	NM	<0.9	<0.75	<0.45	<0.48	<0.83	<0.89	<0.18	
	3/7/2013	31.42	721.78	10.8	7.15	9269	124	1.0	NM	NM	NM	<0.9	<0.75	<0.45	0.97 J	<0.83	<0.89	<0.18	
	5/20/2013	27.45	725.75	16.2	7.08	674	24	0.8	NM	NM	NM	<0.44	<0.28	<0.47	0.74 J	0.86 J	<0.37	<0.18	
	8/28/2013	26.62	726.58	17.0	7.15	749	97	5.1	NM	NM	NM	<0.44	<0.28	<0.47	1.8	0.79 J	<0.37	<0.18	
	12/11/2013	28.68	724.52	13.2	7.20	694	50	6.6	NM	NM	NM	<0.44	<0.28	<0.47	0.89 J	<0.42	<0.37	<0.18	
	3/11/2014	29.29	723.91	12.4	7.23	749	-75	7.4	NM	NM	NM	<0.44	<0.28	<0.47	0.42 J	<0.42	<0.37	<0.18	
	6/24/2014	27.92	725.28	17.4	7.22	762	137	7.5	NM	NM	NM	<0.50	<0.24	<0.50	0.75 J	3	<0.26	<0.18	
	9/24/2014	28.13	725.07	16.4	7.27	779	102	7.1	NM	NM	NM	<0.50	<0.24	<0.50	0.84 J	<0.26	<0.26	<0.18	
MW-107	3/11/2010	27.7	726.08	14.1	7.05	794	139	5.0	<100	NM	NM	15.3	16.4	<1.0	1.6	63.7	4.3	<1.0	<1.0
	5/27/2010	27.17	726.61	14.1	7.00	784	91	8.0	<100	31.6	NM	13.8	14.1	<1.0	1.4	53.0	3.2	<1.0	<1.0
	7/1/2010	27.35	726.43	14.5	6.70	723	0	7.7	<100	23.3	NM	12	14.9	<1.0	1.5	57.1	3.3	<1.0	<1.0
	7/29/2010	27.25	726.53	15.3	7.09	728	19	5.1	<100	22.6	NM	13.3	<1.0	1.6	53.3	2.9	<1.0	<1.0	
	8/31/2010	26.78	727.00	16.6	7.00	726	10	4.7	<100	13.2	NM	11.1	<1.0	1.4	46.2	5.4	<1.0	<1.0	
	9/24/2010	27.28	726.50	15.6	7.11	696	29	5.2	<100	10.8	NM	10.8	16.7	<1.0	1.7	51.4	8.0	<1.0	<1.0
	11/4/2010	27.97	725.81	15.0	7.13	743	48	6.8	<100	<5	NM	10.7	<1.0	1.6	51.3	4.3	<1.0	<1.0	
	11/29/2010	28.44	725.34	14.7	7.15	721	62	7.1	<100	<5	NM	11.2	<1.0	1.6	48.2	4.1	<1.0	<1.0	
	12/20/2010	28.67	725.11	14.8	7.12	688	16	5.1	<100	8.9	NM	11.8	13.4	1.5	48.8	4.3	<1.0	<1.0	
	3/2/2011	28.35	725.43	14.3	7.14	668	81	4.9	NM	NM	NM	9.9	1.5	1.3	36.9	26.7	<0.89	<0.18	
	7/7/2011	28.25	725.53	15.3	7.25	656	10	5.0	NM	NM	NM	12.5	<0.75	<0.45	20.7	12.0	<0.89	<0.18	
	9/23/2011	28.98	724.80	14.9	7.17	668	14	4.7	NM	NM	NM	8.1	<0.75	1.1	17.9				

Table 2
Long Term Monitoring Wells on Warner Property - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters						Inorganics				Volatile Organic Compounds							
		Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH Std. Units	Spec. Cond. μmhos/cm	ORP mV	Dis. Oxygen mg/L	Total Chrome μg/L	Dis. Iron μg/L	Dis. Manganese μg/L	Sulfate mg/L	1,1,1-TCA μg/L	1,1-DCA μg/L	PCE μg/L	TCE μg/L	cis-1,2-DCE μg/L	trans-1,2-DCE μg/L	Vinyl Chloride μg/L
Long Term Groundwater Clean-up Goal - All LTMW Wells⁽¹⁾																			
LTMW-01	3/11/2010	27.51	725.27	11.9	7.06	803	135	2.0	< 5.0	<100	NM	16.6	19.5	8.7	<2.5	<2.5	395	2.8	<2.5
	6/27/2010	27.10	725.68	13.3	6.45	724	11	3.6	< 5.0	NM	NM	14.1	6.6	<4.0	< 4.0	223	<4.0	<4.0	
	9/23/2010	27.10	725.68	15.1	7.04	717	44	2.0	< 0.44	NM	NM	22.1	7.4	<4.0	< 4.0	199	14.6	<4.0	
	12/22/2010	28.53	724.25	12.2	7.15	712	40	1.8	< 5.0	<100	5.4	13.3	19.7	9.1	<2.0	< 2.0	230	3.4	<2.0
	3/16/2011	28.25	724.53	13.3	7.18	778	148	2.3	NM	NM	NM	16.7	3.6	< 0.9	< 0.96	119	2.6	< 0.36	
	7/6/2011	28.05	724.73	13.6	7.22	737	30	1.9	NM	NM	NM	15.6	4.4	< 0.45	< 0.48	115	< 0.89	< 0.18	
	9/22/2011	28.80	723.98	13.4	7.14	686	45	1.3	NM	NM	NM	25.6	4.4	< 0.45	< 0.48	98.4	< 0.89	< 0.18	
DUP-02	9/22/2011	28.80	723.98	13.4	7.14	686	45	1.3	NM	NM	NM	25.1	4.3	< 0.45	< 0.48	97.9	< 0.89	< 0.18	
	12/21/2011	29.20	723.58	11.2	7.12	692	-41	2.7	NM	NM	NM	23.7	5.1	< 0.45	< 0.48	89.2	< 0.89	< 0.18	
	3/1/2012	29.67	723.11	11.5	7.22	761	98	4.0	< 2.4	NM	NM	20.8	3.4	< 0.45	< 0.48	50.2	< 0.89	< 0.18	
	6/7/2012	29.91	722.87	13.1	7.31	760	-50	1.0	5.5	NM	NM	18	2.4	< 0.45	< 0.48	23	< 0.89	< 0.18	
	9/27/2012	31.62	721.16	12.7	7.17	718	6	1.9	<2.4	NM	NM	22.9	3.2	< 0.45	0.72 J	23.9	< 0.89	< 0.18	
	12/21/2012	32.09	720.69	12.4	7.12	725	90	3.3	< 2.4	NM	NM	15.1	2.6	< 0.45	< 0.48	13.8	< 0.89	< 0.18	
	3/8/2013	31.47	721.31	11.2	7.22	707	175	3.6	< 1.4	NM	NM	10.2	2.1	< 0.45	< 0.48	18.2	< 0.89	< 0.18	
	5/21/2013	27.52	725.26	13.8	7.18	706	131	3.6	< 1.4	NM	NM	10.4	1.2	< 0.47	< 0.43	5.1	< 0.37	< 0.18	
	8/29/2013	26.84	725.94	16.0	7.19	715	96	3.6	< 1.4	NM	NM	7.2	0.92 J	< 0.47	< 0.43	4.1	< 0.37	< 0.18	
	12/12/2013	28.87	723.91	10.7	7.16	671	126	4.0	< 1.4	NM	NM	3.4	0.42 J	< 0.47	< 0.36	2.9	< 0.37	< 0.18	
	3/11/2014	29.44	723.34	10.8	7.21	737	-84	2.7	< 1.4	NM	NM	9.3	0.75 J	< 0.47	< 0.36	4.1	< 0.37	< 0.18	
	6/24/2014	28.05	724.73	14.4	7.15	841	31	0.2	< 1.5	NM	NM	32.8	3.5	< 0.50	< 0.33	12.7	< 0.26	< 0.18	
	9/23/2014	28.28	724.50	14.7	7.19	766	71	0.2	< 1.5	NM	NM	22.5	2.4	< 0.50	0.40 J	9.3	< 0.26	< 0.18	
LTMW-02	3/11/2010	27.33	725.14	12.0	7.15	766	166	7.0	< 5.0	<100	NM	16.6	<1.0	<1.0	<1.0	26.8	7.3	<1.0	<1.0
	6/27/2010	26.83	725.64	13.9	6.71	672	25	10.7	< 5.0	NM	NM	<1.0	<1.0	<1.0	16.1	<1.0	<1.0	<1.0	
	9/23/2010	26.83	725.64	14.7	7.21	734	99	6.1	< 0.44	NM	NM	<1.0	<1.0	<1.0	10.1	2.5	<1.0	<1.0	
	12/22/2010	28.27	724.20	10.9	7.25	726	16	5.6	< 0.44	<100	<5.0	15.7	<1.0	<1.0	<1.0	15.1	3.3	<1.0	<1.0
	3/17/2011	27.97	724.50	13.0	7.29	756	158	3.7	NM	NM	NM	<0.9	< 0.75	< 0.45	14.5	3.5	< 0.89	< 0.18	
	7/6/2011	27.80	724.67	15.1	7.27	752	39	3.0	NM	NM	NM	<0.9	< 0.75	< 0.45	13.7	3.8	< 0.89	< 0.18	
	9/22/2011	28.54	723.93	13.0	7.21	710	53	3.9	NM	NM	NM	<0.9	< 0.75	< 0.45	13.8	2.2	< 0.89	< 0.18	
	12/21/2011	28.95	723.52	11.6	7.25	689	-25	4.3	NM	NM	NM	<0.9	< 0.75	< 0.45	10	1.8	< 0.89	< 0.18	
	3/1/2012	29.41	723.06	10.1	7.32	723	105	4.0	< 2.4	NM	NM	<0.9	< 0.75	< 0.45	9.3	< 0.83	< 0.89	< 0.18	
	6/6/2012	29.64	722.83	12.8	7.21	733	15	3.0	< 2.4	NM	NM	<0.9	< 0.75	< 0.45	10	< 0.83	< 0.89	< 0.18	
DUP-02	6/6/2012	29.64	722.83	12.8	7.21	733	15	3.0	< 2.4	NM	NM	<0.9	< 0.75	< 0.45	8.9	< 0.83	< 0.89	< 0.18	
	9/28/2012	31.37	721.10	12.0	7.19	700	183	4.1	< 2.4	NM	NM	<0.90	< 0.75	< 0.45	8.4	< 0.83	< 0.89	< 0.18	
	12/21/2012	31.81	720.66	11.8	7.19	697	126	5.3	< 2.4	NM	NM	<0.90	< 0.75	< 0.45	8.0	< 0.83	< 0.89	< 0.18	
	3/8/2013	31.20	721.27	11.3	7.25	694	200	6.2	< 1.4	NM	NM	<0.90	< 0.75	< 0.45	7.0	< 0.83	< 0.89	< 0.18	
	5/21/2013	27.23	725.24	13.1	7.24	717	180	7.6	< 1.4	NM	NM	<0.44	< 0.28	< 0.47	3.8	< 0.42	< 0.37	< 0.18	
	8/29/2013	26.60	725.87	13.5	7.18	699	228	5.1	< 1.4	NM	NM	<0.44	< 0.28	< 0.47	3.0	< 0.42	< 0.37	&	

Table 2
Long Term Monitoring Wells on Warner Property - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters						Inorganics				Volatile Organic Compounds							
		Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH Std. Units	Spec. Cond. μmhos/cm	ORP mV	Dis. Oxygen mg/L	Total Chrome μg/L	Dis. Iron μg/L	Dis. Manganese μg/L	Sulfate mg/L	1,1,1-TCA μg/L	1,1-DCA μg/L	PCE μg/L	TCE μg/L	cis-1,2-DCE μg/L	trans-1,2-DCE μg/L	Vinyl Chloride μg/L
Long Term Groundwater Clean-up Goal - All LTMW Wells⁽¹⁾																			
LTMW-03	3/11/2010	27.16	725.03	11.8	7.19	673	141	7.0	< 5.0	<100	NM	25.2	<1.0	<1.0	<1.0	52.8	57.3	<1.0	<1.0
DUP-01	6/25/2010	26.79	725.40	13.6	8.85	769	15	7.0	< 5.0	NM	NM	NM	<1.0	<1.0	<1.0	107	76	<1.0	<1.0
LTMW-03	9/21/2010	26.62	725.57	15.9	6.86	683	72	3.3	< 5.0	NM	NM	NM	<1.0	<1.0	<1.0	151	66.2	<1.0	<1.0
DUP-01	9/21/2010	26.62	725.57	15.9	6.86	683	72	3.3	< 5.0	NM	NM	NM	<1.0	<1.0	<1.0	153	64.9	<1.0	<1.0
LTMW-03	12/22/2010	28.10	724.09	9.7	7.22	694	36	4.6	< 5.0	<100	<5.0	18.0	<1.0	<1.0	<1.0	143	85.9	<1.0	<1.0
DUP-01	3/17/2011	27.80	724.39	13.3	7.26	707	120	2.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	109	30.1	< 0.89	< 0.18
LTMW-03	7/6/2011	27.59	724.60	16.6	7.30	740	43	5.9	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	77.8	86.6	< 0.89	< 0.18
DUP-01	9/22/2011	28.36	723.83	12.9	7.21	692	38	6.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	84.8	73.9	1.1	1.3
LTMW-03	12/21/2011	28.80	723.39	11.3	7.17	719	-46	4.8	NM	NM	NM	NM	< 0.9	1.5	< 0.45	123	116	< 0.89	1.4
DUP-01	3/6/2012	29.21	722.98	11.3	7.25	756	-9	2.0	5.4	NM	NM	NM	< 0.9	1.3	< 0.45	103	102	< 0.89	1.4
LTMW-03	6/6/2012	29.44	722.75	14.4	7.17	752	-30	3.0	5.6	NM	NM	NM	< 0.9	1.1	< 0.45	69.2	91.5	< 0.89	< 0.18
DUP-01	9/28/2012	31.18	721.01	12.4	7.21	675	13	1.5	< 2.4	NM	NM	NM	< 0.9	1.2	< 0.45	84.5	55.3	< 0.89	10
LTMW-03	12/20/2012	31.62	720.57	10.0	7.15	727	86	1.9	< 2.4	NM	NM	NM	< 0.9	1.3	< 0.45	92.8	80.7	< 0.89	2.3
DUP-01	3/8/2013	31.00	721.19	10.4	7.29	655	36	0.5	< 1.4	NM	NM	NM	< 0.9	< 0.75	< 0.45	59.9	31.2	< 0.89	6
LTMW-03	5/21/2013	27.00	725.19	13.5	7.21	689	57	0.9	2.7 J	NM	NM	NM	< 0.44	< 0.28	< 0.47	73.6	37.9	< 0.89	2.6
DUP-01	8/29/2013	26.42	725.77	14.8	7.18	645	133	8.3	< 1.4	NM	NM	NM	< 0.44	< 0.28	< 0.47	66.8	45.8	< 0.89	< 0.18
LTMW-03	9/30/2013	27.29	724.90	14.0	7.26	588	154	7.3	1.9 J	NM	NM	NM	< 0.44	0.34 J	< 0.47	50.4	20.6	< 0.37	0.26 J
DUP-01	10/23/2013	27.76	724.43	11.6	7.69	567	90	7.7	1.8 J	NM	NM	NM	< 0.44	< 0.28	< 0.47	39.6	15.6	< 0.37	< 0.18
LTMW-03	11/25/2013	28.15	724.04	10.3	7.39	479	39	5.1	1.9 J	NM	NM	NM	< 0.44	< 0.28	< 0.47	32.1	16	< 0.37	< 0.18
DUP-02	12/12/2013	28.43	723.76	8.6	7.46	486	-8	4.0	2.2 J	NM	NM	NM	< 0.44	< 0.28	< 0.47	29.4	14.4	< 0.37	1.6
LTMW-03	12/12/2013	28.43	723.76	8.6	7.46	486	-8	4.0	< 1.4	NM	NM	NM	< 0.44	< 0.28	< 0.47	27.7	12.8	< 0.37	1.5
DUP-02	3/13/2014	28.83	723.36	9.8	7.42	679	-88	2.1	< 1.4	NM	NM	NM	< 0.44	< 0.28	< 0.47	5.6	26.5	< 0.37	< 0.18
LTMW-03	6/26/2014	27.60	724.59	14.9	7.41	655	-122	1.3	< 1.5	NM	NM	NM	< 0.50	< 0.24	< 0.50	4.9	31	0.34 J	3.6
DUP-02	9/25/2014	27.88	724.31	13.8	7.51	595	-120	1.6	< 1.5	NM	NM	NM	< 0.50	< 0.24	< 0.50	6.6	15	< 0.26	11.2
LTMW-03A	3/11/2010	27.55	724.97	11.9	7.07	863	153	5.0	< 5.0	<100	NM	20.1	<2.0	<2.0	<2.0	275	53.1	2.2	<2.0
LTMW-03A	6/25/2010	27.15	725.37	13.5	6.81	926	14	7.1	< 5.0	NM	NM	NM	<2.0	<2.0	<2.0	167	30.8	<2.0	<2.0
LTMW-03A	9/21/2010	27.03	725.49	15.8	6.73	770	90	3.8	9.2	NM	NM	NM	<2.0	<2.0	<2.0	56.6	8	<2.0	<2.0
LTMW-03A	12/22/2010	28.48	724.04	10.1	7.28	684	14	1.3	< 5.0	<100	<5.0	13.2	<1.0	<1.0	<1.0	33.9	6.5	<1.0	<1.0
LTMW-03A	3/17/2011	28.17	724.35	12.9	7.37	682	-31	0.1	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	10.2	15.9	< 0.89	< 0.18
LTMW-03A	7/6/2011	27.99	724.53	15.9	7.48	674	-101	0.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	1.4	55.5	< 0.89	5.3
LTMW-03A	9/22/2011	28.74	723.78	12.5	7.46	623	-101	1.8	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	2.2	15.2	< 0.89	10.2
LTMW-03A	12/21/2011	29.10	723.42	11.4	7.40	656	-122	1.9	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	2.5	2.4	< 0.89	4.7
LTMW-03A	3/6/2012	29.61	722.91	11.4	7.46	727	-37	0.2	< 2.4	NM	NM	NM	< 0.9	< 0.75	< 0.45	2.6	1.4	< 0.89	4.7
LTMW-03A	6/6/2012	29.83	722.69	14.1	7.37	736													

Table 3
 Long Term Monitoring Wells on Hononegah Road - Data Summary
 Former Warner Facility
 Roscoe, Illinois

Well	Date	Field Parameters								Inorganics					Volatile Organic Compounds							
		Water Depth	Well Elev.	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	Total Chrome	Dis. Iron	Manganese	Nitrate	Sulfate	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
		Feet	Ft. MSL	°C	Std. Units	umhos/cm	mV	mg/L	µg/L	µg/L	µg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Long Term Groundwater Clean-up Goal - All LTMW Wells ⁽¹⁾																						
Non-potable Intermediate Groundwater Cleanup Criteria ⁽²⁾																						
LTMW-04	3/12/2010	30.14	748.50	718.36	11.7	7.35	995	86	4.0	11.9	216	NM ⁽³⁾	NM	20.8	<1.0 ⁽⁴⁾	<1.0	<1.0	3.0	1.2	<1.0	<1.0	
	6/24/2010	29.60		718.90	13.6	6.84	866	12	6.9	7.6	NM	NM	NM	<1.0	<1.0	<1.0	3.7	1.6	<1.0	<1.0		
	9/22/2010	29.80		718.70	13.4	7.31	806	13	5.8	10.4	NM	NM	NM	1.1	<1.0	<1.0	3.5	1.0	<1.0	<1.0		
	12/22/2010	30.75		717.75	10.4	7.25	821	-6	4.4	42.1	164	139	NM	21.6	<1.0	<1.0	<1.0	2.5	<1.0	<1.0		
	3/15/2011	30.23		718.27	11.5	7.32	873	62	6.8	NM	NM	NM	NM	<0.9	<0.75	<0.45	3.5	1.4	<0.89	<0.18		
	7/5/2011	30.45		718.05	13.0	7.37	832	27	7.9	NM	NM	NM	NM	<0.9	<0.75	<0.45	3.7	2.5	<0.89	<0.18		
	9/21/2011	31.30		717.20	13.3	7.24	802	16	8.1	NM	NM	NM	NM	<0.9	<0.75	<0.45	3.4	2.0	<0.89	<0.18		
DUP-02	12/22/2011	31.25		717.25	10.8	7.26	804	-29	6.3	NM	NM	NM	NM	1.0	<0.75	<0.45	4.5	4.8	<0.89	<0.18		
	12/22/2011	31.25		717.25	10.8	7.26	804	-29	6.3	NM	NM	NM	NM	<0.9	<0.75	<0.45	4.6	4.6	<0.89	<0.18		
DUP-01	3/1/2012	31.72		716.78	10.9	7.34	871	70	5.0	6.8	NM	NM	NM	<0.9	<0.75	<0.45	5.7 ⁽⁵⁾	5.2	<0.89	<0.18		
	6/6/2012	31.73		716.77	12.5	7.3	866	26	5.0	5.6	NM	NM	NM	<0.9	<0.75	<0.45	6.4	5.8	<0.89	<0.18		
DUP-01	9/26/2012	33.58		714.92	14.1	7.28	825	159	6.5	<2.4	NM	NM	NM	1.0 J	<0.75	<0.45	7.1	8	<0.89	<0.18		
DUP-01	9/26/2012	33.58		714.92	14.1	7.28	825	159	6.5	<2.4	NM	NM	NM	1.0	<0.75	<0.45	7.1	8.1	<0.89	<0.18		
DUP-01	12/19/2012	33.55		714.95	11.6	7.35	844	148	7.3	<2.4	NM	NM	NM	<0.9	<0.75	<0.45	8.2	7.8	<0.89	<0.18		
DUP-01	12/19/2012	33.55		714.95	11.6	7.35	844	148	7.3	<2.4	NM	NM	NM	<0.9	<0.75	<0.45	7.9	7.7	<0.89	<0.18		
DUP-01	3/8/2013	32.59		715.91	11.3	7.25	1287	180	5.3	3.8 J	NM	NM	NM	<0.9	<0.75	<0.45	8	7.1	<0.89	<0.18		
DUP-01	3/8/2013	32.59		715.91	11.3	7.25	1287	180	5.3	3.0 J	NM	NM	NM	<0.9	<0.75	<0.45	8.3	8.4	<0.89	<0.18		
DUP-01	5/21/2013	28.75		719.75	13.8	7.26	807	117	5.8	2.9 J	NM	NM	NM	1.1	<0.28	<0.47	11.5	9.5	<0.37	<0.18		
DUP-01	5/21/2013	28.75		719.75	13.8	7.26	807	117	5.8	2.9 J	NM	NM	NM	1.1	<0.28	<0.47	11.7	9.4	<0.37	<0.18		
DUP-01	8/27/2013	29.94		718.56	15.6	7.29	831	116	6.2	<1.4	NM	NM	NM	1.0	<0.28	<0.47	8.6	5.6	<0.37	<0.18		
DUP-01	8/27/2013	29.94		718.56	15.6	7.29	831	116	6.2	2.8 J	NM	NM	NM	1.1	<0.28	<0.47	8.7	5.7	<0.37	<0.18		
DUP-01	12/10/2013	31.32		717.18	10.1	7.32	818	87	6.3	1.8 J	NM	NM	NM	1.2	<0.28	<0.47	7.9	6.3	<0.37	<0.18		
DUP-01	12/10/2013	31.32		717.18	10.1	7.32	818	87	6.3	2.9 J	NM	NM	NM	1.0	<0.28	<0.47	7.2	5.8	<0.37	<0.18		
DUP-01	3/11/2014	31.62		716.88	9.4	7.29	1610	-90	5.7	5.9	NM	NM	NM	0.81 J	<0.28	<0.47	7.5	5.5	<0.37	<0.18		
DUP-01	3/11/2014	31.62		716.88	9.4	7.29	1610	-90	5.7	6.1	NM	NM	NM	0.77 J	<0.28	<0.47	7.6	5.6	<0.37	<0.18		
DUP-01	6/24/2014	30.10		718.40	14.5	7.29	881	123	5.6	2.3 J	NM	NM	NM	0.86 J	<0.24	<0.50	9.6	8.7	<0.26	<0.18		
DUP-01	6/24/2014	30.10		718.40	14.5	7.29	881	123	5.6	<1.5	NM	NM	NM	0.84 J	<0.24	<0.50	8.8	8.9	<0.26	<0.18		
DUP-01	9/23/2014	30.89		717.61	12.3	7.37	838	75	5.6	<1.5	NM	NM	NM	0.75 J	<0.24	<0.50	9.4	8.6	<0.26	<0.18		
DUP-01	9/23/2014	30.89		717.61	12.3	7.37	838	75	5.6	<1.5	NM	NM	NM	0.65 J	<0.24	<0.50	9.3	8.5	<0.26	<0.18		
LTMW-05	3/12/2010	30.92	749.35	718.43	11.7	7.24	811	108	5.0	14.5	<3.7	NM	NM	19.8	<0.9	<0.75	<0.45	12.3	6.2	<0.89	<0.18	
	6/24/2010	30.40		718.95	13.3	6.92	895	14	6.4	8.9	NM	NM	NM	1.1	<0.75	<0.45	10.9	5.3	<0.89	<0.18		
	9/22/2010	NM	NM	NM	NM	NM	NM	NM	NM	11.2	NM	NM	NM	1.5	<0.75	<0.45	9.2	4.0	<0.89	<0.18		
	12/22/2010	31.59		7																		

Table 3
 Long Term Monitoring Wells on Hononegah Road - Data Summary
 Former Warner Facility
 Roscoe, Illinois

Well	Date	Field Parameters								Inorganics				Volatile Organic Compounds								
		Water Depth	Well Elev.	Water Elev.	Sample Temp.	pH	Spec. Cond.	ORP	Dis. Oxygen	Total Chrome	Dis. Iron	Manganese	Nitrate	Sulfate	1,1,1-TCA	1,1-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
		Feet	Ft. MSL	°C	Std. Units	µmhos/cm	mV	mg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Long Term Groundwater Clean-up Goal - All LTMW Wells ⁽¹⁾																						
Non-potable Intermediate Groundwater Cleanup Criteria ⁽²⁾																						
LTMW-06	3/12/2010	31.80	749.95	718.15	11.7	7.23	949	94	7.0	< 0.32	<100	NM	NM	17.4	<1.0	<1.0	<1.0	40.4	14.0	<1.0	<1.0	
	6/25/2010	31.28	718.67	14.1	6.75	1030	20	7.8	< 5.0	NM	NM	NM	NM	<1.0	<1.0	<1.0	<1.0	35.4	13.0	<1.0	<1.0	
	9/22/2010	31.50	718.45	13.5	7.19	857	41	5.7	7.0	NM	NM	NM	NM	<1.0	<1.0	<1.0	<1.0	33.2	9.5	<1.0	<1.0	
	12/22/2010	32.40	717.55	10.4	7.27	864	71	5.7	11	<100	7.7	NM	NM	17.1	<1.0	<1.0	<1.0	28.1	9.9	<1.0	<1.0	
	3/16/2011	31.88	718.07	12.0	7.27	1180	151	8.4	NM	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	32	7.3	< 0.89	< 0.18		
	7/5/2011	32.12	717.83	13.6	7.32	1121	70	9.2	NM	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	20.1	5.6	< 0.89	< 0.18		
	9/21/2011	32.96	716.99	12.8	7.21	939	74	9.9	NM	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	26.8	7.5	< 0.89	< 0.18		
	12/22/2011	32.90	717.05	9.9	7.14	1449	12	7.9	NM	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	28	9.3	< 0.89	< 0.18		
	3/1/2012	33.34	716.61	11.0	7.77	937	89	5.0	< 2.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	22	11.5	< 0.89	< 0.18		
	6/6/2012	33.34	716.61	13.2	7.33	902	59	4.0	6.6	NM	NM	NM	NM	4.3	< 0.75	< 0.45	29.3	15.0	< 0.89	< 0.18		
	9/27/2012	35.20	714.75	13.7	7.24	919	185	7.7	< 2.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	40.4	26.7	< 0.89	< 0.18		
	12/19/2012	35.13	714.82	11.2	7.26	1305	176	8.7	< 2.4	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	40.5	17.6	< 0.89	< 0.18		
	3/7/2013	34.13	715.82	9.5	7.32	8772	191	7.6	1.7 J	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	34.4	19.6	< 0.89	< 0.18		
	5/20/2013	30.40	719.55	14.2	7.31	914	100	3.3	< 1.4	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	32	16.9	< 0.37	< 0.18		
	8/27/2013	31.63	718.32	15.8	7.30	900	196	7.1	2.5 J	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	38.6	16.9	< 0.37	< 0.18		
	12/10/2013	32.95	717.00	9.6	7.25	1442	131	8.1	1.9 J	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	41.9	20.4	< 0.37	< 0.18		
	3/11/2014	33.21	716.74	10.0	7.33	941	-98	7.7	< 1.4	NM	NM	NM	NM	< 0.44	< 0.28	< 0.47	28.3	13.7	< 0.37	< 0.18		
	6/24/2014	31.72	718.23	16.9	7.30	977	129	7.2	2.4 J	NM	NM	NM	NM	< 0.50	0.34 J	< 0.50	32.9	24.7	< 0.26	< 0.18		
	9/23/2014	32.54	717.41	14.4	7.39	915	38	6.8	1.6 J	NM	NM	NM	NM	< 0.50	< 0.24	< 0.50	33.5	25.2	< 0.26	< 0.18		
LTMW-07	3/12/2010	31.97	750.07	718.10	11.8	7.26	819	-19	5.0	18.8	<100	NM	NM	19.9	<1.0	<1.0	<1.0	14.1	9.1	<1.0	<1.0	
	DUP-02	3/12/2010	31.97	718.10	11.8	7.26	819	-19	5.0	20.0	<100	NM	NM	19.9	<1.0	<1.0	<1.0	14.4	8.9	<1.0	<1.0	
	6/25/2010	31.47	718.60	12.6	6.84	915	17	8.0	42.9	NM	NM	NM	NM	<1.0	<1.0	<1.0	15.5	9.7	<1.0	<1.0		
	9/22/2010	31.72	718.35	13.6	7.23	802	58	4.8	54.8	NM	NM	NM	NM	<1.0	<1.0	<1.0	19.3	10.6	<1.0	<1.0		
	12/22/2010	32.57	717.50	10.3	7.3	804	68	5.3	35.7	<100	6.7	NM	NM	20	<1.0	<1.0	<1.0	14.4	10.7	<1.0	<1.0	
	DUP-01	3/16/2011	32.05	718.02	12.3	7.33	858	140	6.6	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	12.0	7.8	< 0.89	< 0.18		
	3/16/2011	32.05	718.02	12.3	7.33	858	140	6.6	NM	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	11.9	7.6	< 0.89	< 0.18		
	7/6/2011	32.36	717.71	12.7	7.42	848	39	7.5	NM	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	11.1	8	< 0.89	< 0.18		
	9/21/2011	33.12	716.95	12.2	7.24	848	80	8.2	NM	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	11.5	5.8	< 0.89	< 0.18		
	12/22/2011	33.04	717.03	9.6	7.26	835	17	6.2	NM	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	7.5	4.8	< 0.89	< 0.18		
	3/1/2012	33.51	716.56	10.4	7.29	919	95	5.0	34.2	NM	NM	NM	NM	< 0.9	< 0.75	< 0.45	5.7	3.4	< 0.89	< 0.18		
	6/6/2012	33.52	716.55	12.7	7.27	928	61	4.0	31.5	NM	NM	NM	NM									

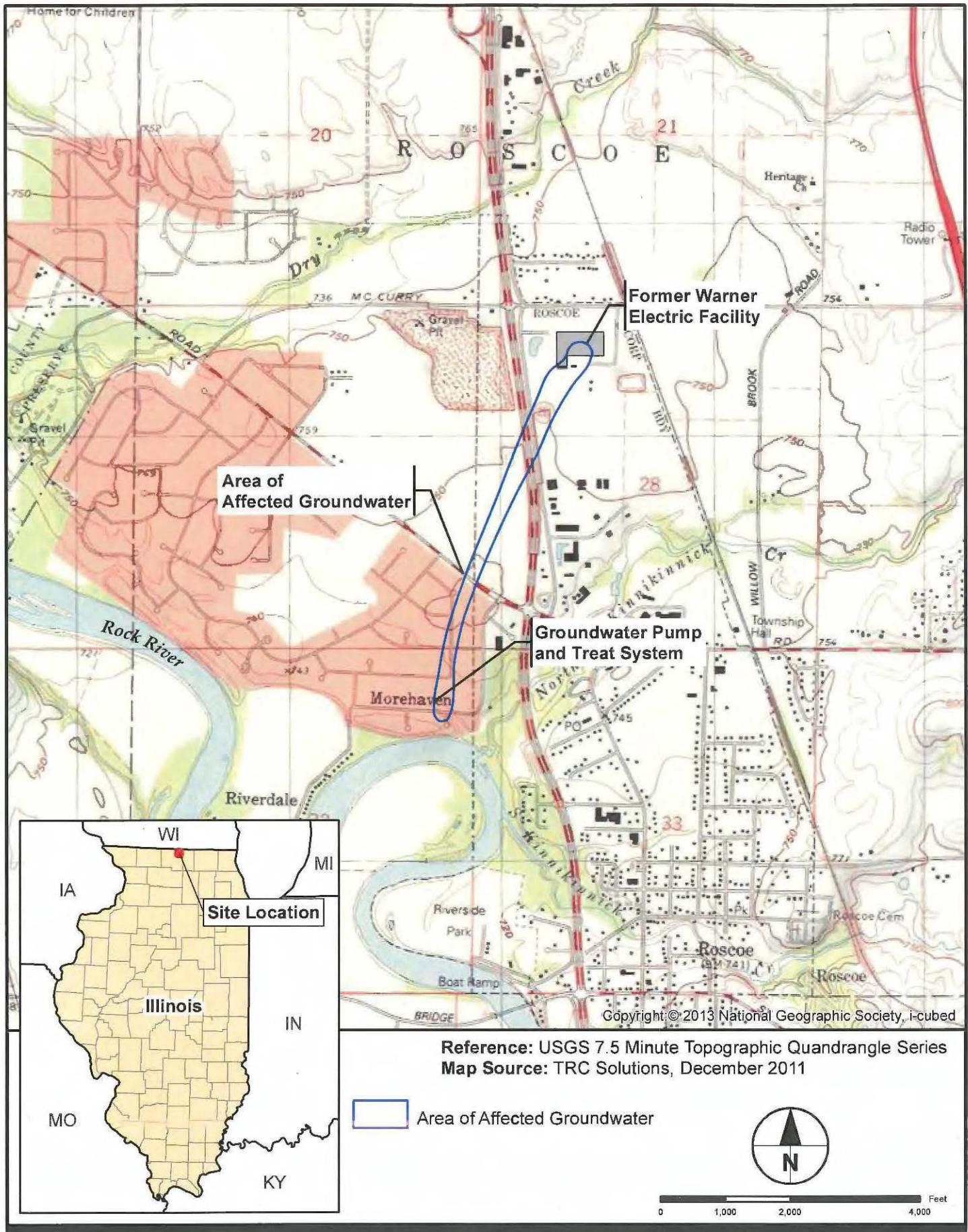
Table 4
Long Term Monitoring Wells on Edgemere Terrace - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Inorganics				Volatile Organic Compounds						
		Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH	Spec. Cond. µmhos/cm	ORP mV	Dis. Oxygen mg/L	Total Chrome µg/L	Dis. Iron µg/L	Dis. Manganese µg/L	Sulfate mg/L	1,1,1-TCA µg/L	1,1-DCA µg/L	PCE µg/L	TCE µg/L	cis-1,2-DCE µg/L	trans-1,2-DCE µg/L	Vinyl Chloride µg/L
									100				200	200	5	5	70	100	2
									42				76	47	45	25	620	970	120
Long Term Clean-up Criteria - All LTMW Wells ⁽¹⁾																			
Surface Water Discharge Intermediate Clean-up Criteria ⁽²⁾									42				76	47	45	25	620	970	120
LTMW-08	3/8/2010	17.73	711.43	10.4	7.17	718	25	6.4	5.2	<100 ⁽⁴⁾	160	NM	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0
DUP-01	6/23/2010	16.08	713.08	13.1	6.80	930	12	8.5	<5.0	NM ⁽³⁾	NM	NM	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0
DUP-01	6/23/2010	16.08	713.08	13.1	6.80	930	12	8.5	<5.0	NM ⁽³⁾	NM	NM	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0
DUP-01	9/21/2010	17.42	711.74	14.6	7.21	781	31	5.4	34.7	NM	NM	NM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DUP-01	12/22/2010	17.04	712.12	10.3	7.31	775	49	7.3	67.5	<100	14.1	21.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DUP-01	3/15/2011	16.34	712.82	10.8	7.34	828	99	7.0	NM	NM	NM	<0.9	<0.75	<0.45	1.1	<0.83	<0.89	<0.18	
DUP-01	6/30/2011	17.66	711.50	13.2	7.27	803	49	8.7	NM	NM	NM	<0.9	<0.75	<0.45	1.2	<0.83	<0.89	<0.18	
DUP-01	9/21/2011	18.75	710.41	13.1	7.24	785	55	9.4	NM	NM	NM	<0.9	<0.75	<0.45	1.0	<0.83	<0.89	<0.18	
DUP-01	9/21/2011	18.75	710.41	13.1	7.24	785	55	9.4	NM	NM	NM	<0.9	<0.75	<0.45	1.1	<0.83	<0.89	<0.18	
DUP-01	12/20/2011	17.63	711.53	10.7	7.03	793	133	7.9	NM	NM	NM	<0.9	<0.75	<0.45	1.4	<0.83	<0.89	<0.18	
DUP-01	12/20/2011	17.63	711.53	10.7	7.03	793	133	7.9	NM	NM	NM	<0.9	<0.75	<0.45	1.4	<0.83	<0.89	<0.18	
DUP-01	2/28/2012	18.43	710.73	9.6	7.19	861	100	9.4	12.4	NM	NM	NM	<0.9	<0.75	<0.45	1.3	<0.83	<0.89	<0.18
DUP-01	6/5/2012	18.39	710.77	13.2	7.23	861	105	5.0	8.5	NM	NM	NM	<0.9	<0.75	<0.45	1.2	<0.83	<0.89	<0.18
DUP-01	6/5/2012	18.39	710.77	13.2	7.23	861	105	5.0	7.6	NM	NM	NM	<0.9	<0.75	<0.45	1.4	<0.83	<0.89	<0.18
DUP-01	9/26/2012	20.25	708.91	NA	7.27	825	183	5.5	<2.4	NM	NM	NM	<0.9	<0.75	<0.45	2	1.1	<0.89	<0.18
DUP-01	12/19/2012	19.61	709.55	10.8	7.28	832	194	6.5	<2.4	NM	NM	NM	<0.9	<0.75	<0.45	2.4	1.5	<0.89	<0.18
DUP-01	3/6/2013	18.52	710.64	7.8	7.32	807	166	5.8	2.2 J	NM	NM	NM	<0.9	<0.75	<0.45	3.1	2.1	<0.89	<0.18
DUP-01	5/20/2013	15.02	714.14	13.5	7.30	764	-248	0.2	<1.4	NM	NM	NM	<0.44	<0.28	<0.47	1	<0.42	<0.37	<0.18
DUP-01	8/26/2013	18.08	711.08	16.9	7.27	802	114	6.4	2.8 J	NM	NM	NM	0.56 J	<0.28	<0.47	1.5	<0.42	<0.37	<0.18
DUP-01	12/9/2013	18.43	710.73	9.4	7.26	837	82	6.3	2.4 J	NM	NM	NM	0.61 J	<0.28	<0.44	2.1	0.96 J	<0.37	<0.18
DUP-01	3/10/2014	18.75	710.41	10.3	7.39	835	-154	5.9	2.5 J	NM	NM	NM	0.51 J	<0.28	<0.47	1.9	0.78 J	<0.37	<0.18
DUP-01	6/23/2014	16.15	713.01	13.8	7.30	906	108	6.6	2.3 J	NM	NM	NM	0.54 J	<0.24	<0.50	1.7	0.52 J	<0.26	<0.18
DUP-01	9/22/2014	18.41	710.75	14.0	7.35	863	60	6.5	<1.5	NM	NM	NM	<0.50	<0.24	<0.50	1.6	0.61 J	<0.26	<0.18
LTMW-09	3/8/2010	18.12	711.19	11.1	6.41	797	58	2.0	<5.0	<100	225	NM	1.1	<1.0	<1.0	9.3 ⁽⁵⁾	6.5	<1.0	<1.0
DUP-01	3/8/2010	18.12	711.19	11.1	6.41	797	58	2.0	<5.0	NM	NM	NM	1.1	<1.0	<1.0	9.6 ⁽⁵⁾	6.4	<1.0	<1.0
DUP-01	6/24/2010	16.42	712.89	13.4	6.74	1080	18	3.4	<5.0	NM	NM	NM	1.1	<1.0	<1.0	7.7	3.4	<1.0	<1.0
DUP-01	9/21/2010	17.86	711.45	14.5	7.20	890	85	4.6	7.8	NM	NM	NM	1.1	<1.0	<1.0	7.1	2.4	<1.0	<1.0
DUP-01	12/22/2010	17.45	711.86	10.7	7.30	891	71	5.9	14.1	<100	<5	18.3	<1.0	<1.0	<1.0	5.4	2.8	<1.0	<1.0
DUP-01	3/15/2011	16.75	712.56	11.4	7.33	944	177	7.5	NM	NM	NM	NM	<0.9	<0.75	<0.45	6.8	2.9	<0.89	<0.18
DUP-01	7/1/2011	18.14	711.17	14.3	7.32	980	78	8.6	NM	NM	NM	NM	1.0	<0.75	<0.45	6.4	1.9	<0.89	<0.18
DUP-01	9/21/2011	19.23	710.08	12.7	7.25	881	72	10.3	NM	NM	NM	NM	<0.9	<0.75	<0.45	6.4	1.6	<0.89	<0.18
DUP-01	12/20/2011	18.09	711.22	11.1	7.19	902	134	7.5	NM	NM	NM	NM	<0.9	<0.75	<0.45	6.1	2.5	<0.89	<0.18
DUP-01	2/29/2012	18.86	710.45	11.7	7.32	974	135	6.0	5.3	NM	NM	NM	<0.9	<0.75	<0.45	5.8	2.2	<0.89	&

Table 4
Long Term Monitoring Wells on Edgemere Terrace - Data Summary
Former Warner Facility
Roscoe, Illinois

Well	Date	Field Parameters							Inorganics				Volatile Organic Compounds						
		Water Depth Feet	Water Elev. Ft. MSL	Sample Temp. °C	pH	Spec. Cond. μmhos/cm	ORP mV	Dis. Oxygen mg/L	Total Chrome μg/L	Dis. Iron μg/L	Dis. Manganese μg/L	Sulfate mg/L	1,1,1-TCA μg/L	1,1-DCA μg/L	PCE μg/L	TCE μg/L	cis-1,2-DCE μg/L	trans-1,2-DCE μg/L	Vinyl Chloride μg/L
									100				200	200	5	5	70	100	2
									42				76	47	45	25	620	970	120
Long Term Clean-up Criteria - All LTMW Wells ⁽¹⁾																			
Surface Water Discharge Intermediate Clean-up Criteria ⁽²⁾									42				76	47	45	25	620	970	120
LTMW-10	3/9/2010	14.80	711.28	11.2	7.24	1170	92	4.0	< 5.0	<100	27.1	NM	<1.0	<1.0	<1.0	21.9	12.4	<1.0	<1.0
	6/24/2010	12.99	713.09	13.7	6.78	1150	16	8.7	< 5.0	NM	NM	NM	1.4	<1.0	<1.0	17.6	8.5	<1.0	<1.0
	9/21/2010	14.40	711.68	14.9	7.17	927	66	5.2	16.5	NM	NM	NM	1.5	<1.0	<1.0	15.2	6.1	<1.0	<1.0
	12/22/2010	14.01	712.07	9.9	7.26	1112	76	6.3	27.8	<100	5.5	19.4	<1.0	<1.0	<1.0	20.8	12	<1.0	<1.0
	12/22/2010	14.01	712.07	9.9	7.26	1112	76	6.3	25.2	<100	<5	19.4	<1.0	<1.0	<1.0	19.0	9.6	<1.0	<1.0
	3/15/2011	13.31	712.77	11.0	7.28	1175	176	7.3	NM	NM	NM	NM	<0.9	<0.75	<0.45	21.4	10	<0.89	<0.18
	7/1/2011	14.65	711.43	14.5	7.23	1029	77	8.8	NM	NM	NM	NM	1.3	<0.75	<0.45	16.4	4.4	<0.89	<0.18
	9/21/2011	15.73	710.35	13.4	7.20	1033	74	8.8	NM	NM	NM	NM	<0.9	<0.75	<0.45	23.4	9.8	<0.89	<0.18
	12/20/2011	14.65	711.43	10.7	7.19	943	144	8.2	NM	NM	NM	NM	<0.9	<0.75	<0.45	21.7	13.4	<0.89	<0.18
	2/29/2012	15.37	710.71	11.2	7.27	1002	134	6.0	26.2	NM	NM	NM	<0.9	<0.75	<0.45	20.4	11.1	<0.89	<0.18
	6/5/2012	15.40	710.68	13.9	7.21	999	89	5.0	8.8	NM	NM	NM	<0.9	<0.75	<0.45	19.4	10.5	<0.89	<0.18
	9/26/2012	17.14	708.94	13.2	7.25	986	138	7.01	< 2.4	NM	NM	NM	<0.9	<0.75	<0.45	9.9	7.4	<0.89	<0.18
	12/19/2012	16.48	709.60	11.1	7.30	1003	175	8.5	< 2.4	NM	NM	NM	<0.9	<0.75	<0.45	7.4	5.1	<0.89	<0.18
	3/16/2013	15.50	710.58	8.4	7.32	946	158	7.5	3.0 J	NM	NM	NM	<0.9	<0.75	<0.45	6	2.7	<0.89	<0.18
	5/20/2013	12.22	713.86	14.7	7.26	969	176	7.8	5.9	NM	NM	NM	<0.44	<0.28	<0.47	14.9	7.7	<0.37	<0.18
	8/26/2013	15.15	710.93	15.4	7.27	1010	144	7.5	2.3 J	NM	NM	NM	<0.44	<0.28	<0.47	20.6	9	<0.37	<0.18
	12/9/2013	15.40	710.68	9.3	7.28	947	97	7.3	1.9 J	NM	NM	NM	<0.44	<0.28	<0.47	10	4.6	<0.37	<0.18
	3/10/2014	15.72	710.36	11.7	7.41	939	-144	6.9	1.8 J	NM	NM	NM	<0.44	<0.28	<0.47	7.1	3.1	<0.37	<0.18
	6/23/2014	13.11	712.97	16.0	7.28	1027	101	7.1	2.2 J	NM	NM	NM	<0.50	<0.24	<0.50	14.6	8.6	<0.26	<0.18
	9/22/2014	15.43	710.65	13.0	7.36	970	70	7.6	< 1.5	NM	NM	NM	<0.50	<0.24	<0.50	15.3	9.4	<0.26	<0.18
DUP-02																			
LTMW-11	3/9/2010	20.80	711.47	10.9	7.28	894	181	4.0	7.1	<100	35.7	NM	<1.0	<1.0	<1.0	12.6	9.6	<1.0	<1.0
	6/23/2010	19.35	712.92	14.4	6.85	1170	12	7.4	< 5.0	NM	NM	NM	<1.0	<1.0	<1.0	18	11.3	<1.0	<1.0
	9/21/2010	20.72	711.55	13.5	7.19	943	93	5.2	5.7	NM	NM	NM	<1.0	<1.0	<1.0	20.4			

FIGURES



Dana Corporation
Former Warner Electric Division
Roscoe, Illinois
Project No.: 60272149 Date: 2014-02-18

Site Location Map

AECOM

Figure: 1

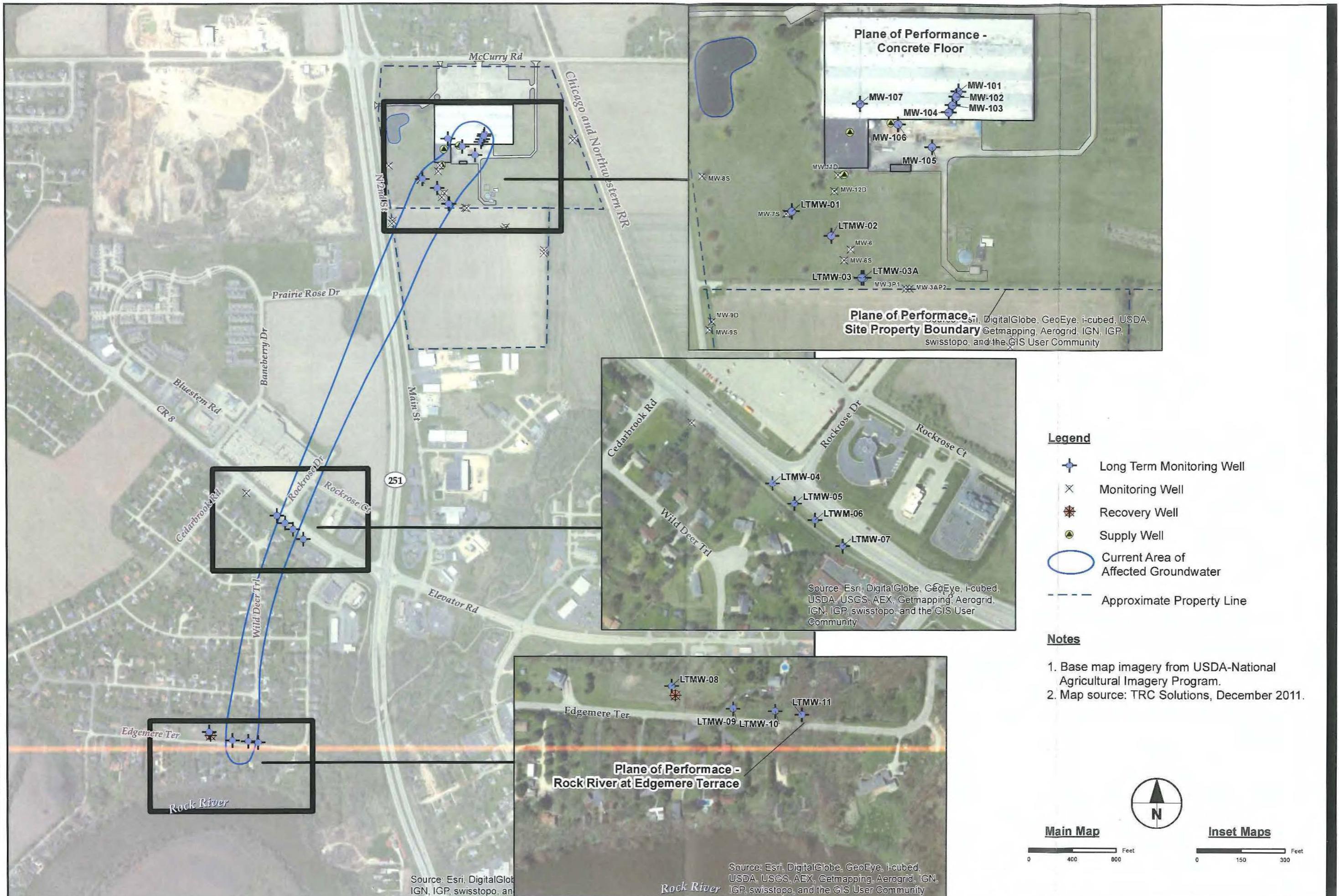


Figure 3
MW-101 CVOC Concentration Trend

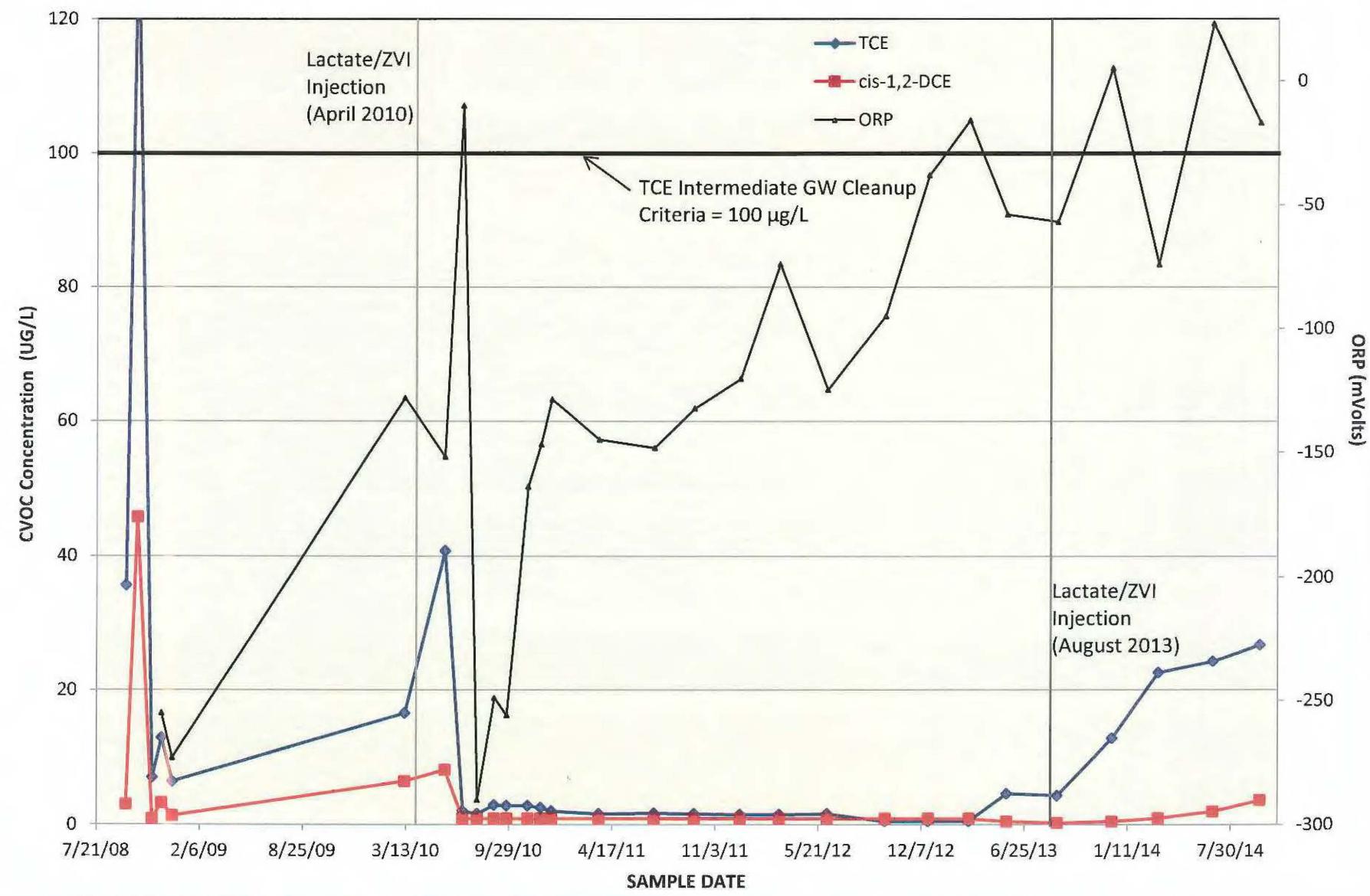


Figure 4
MW-102 CVOC Concentration Trend

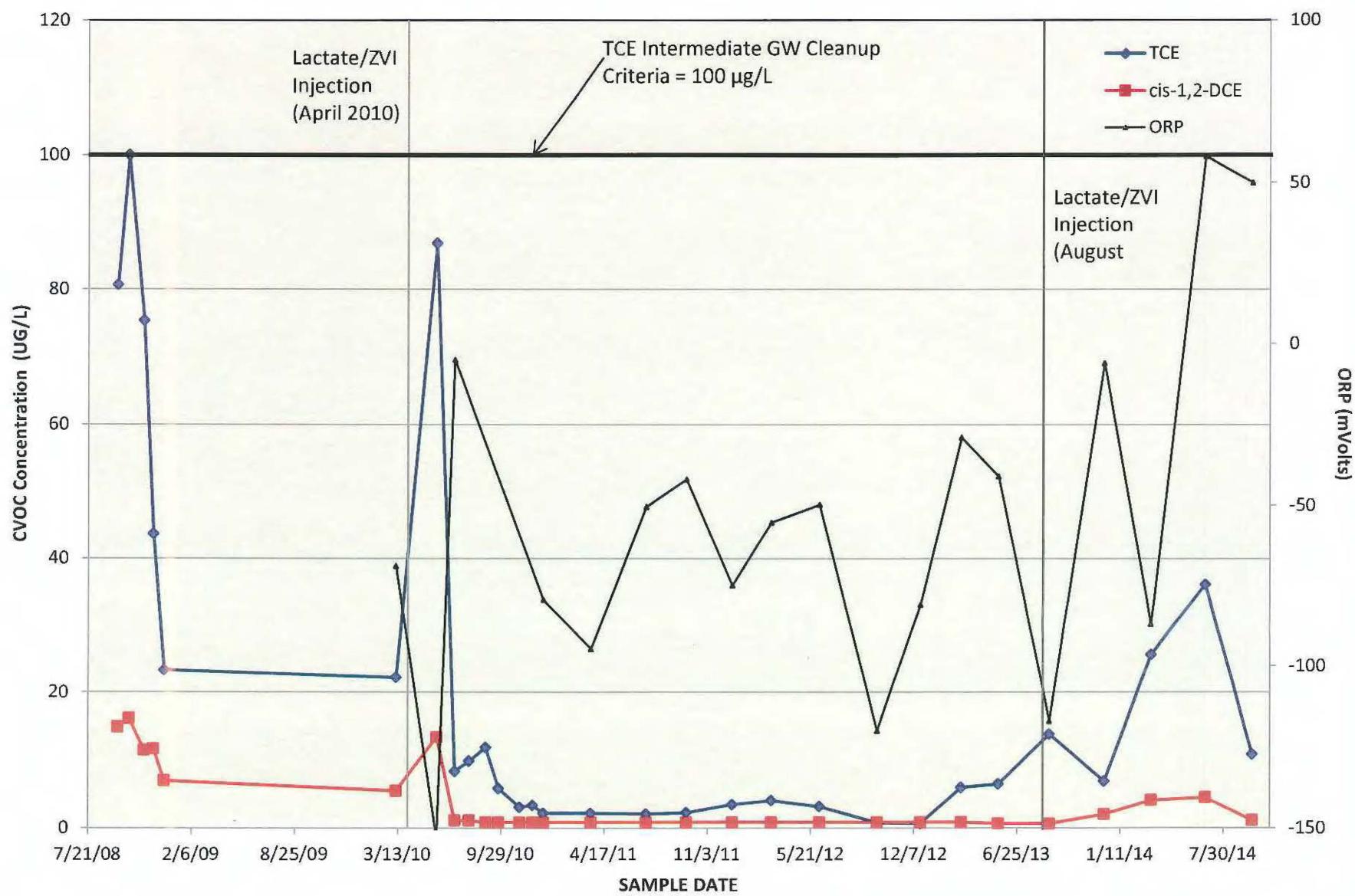


Figure 5
MW-103 CVOC Concentration Trend

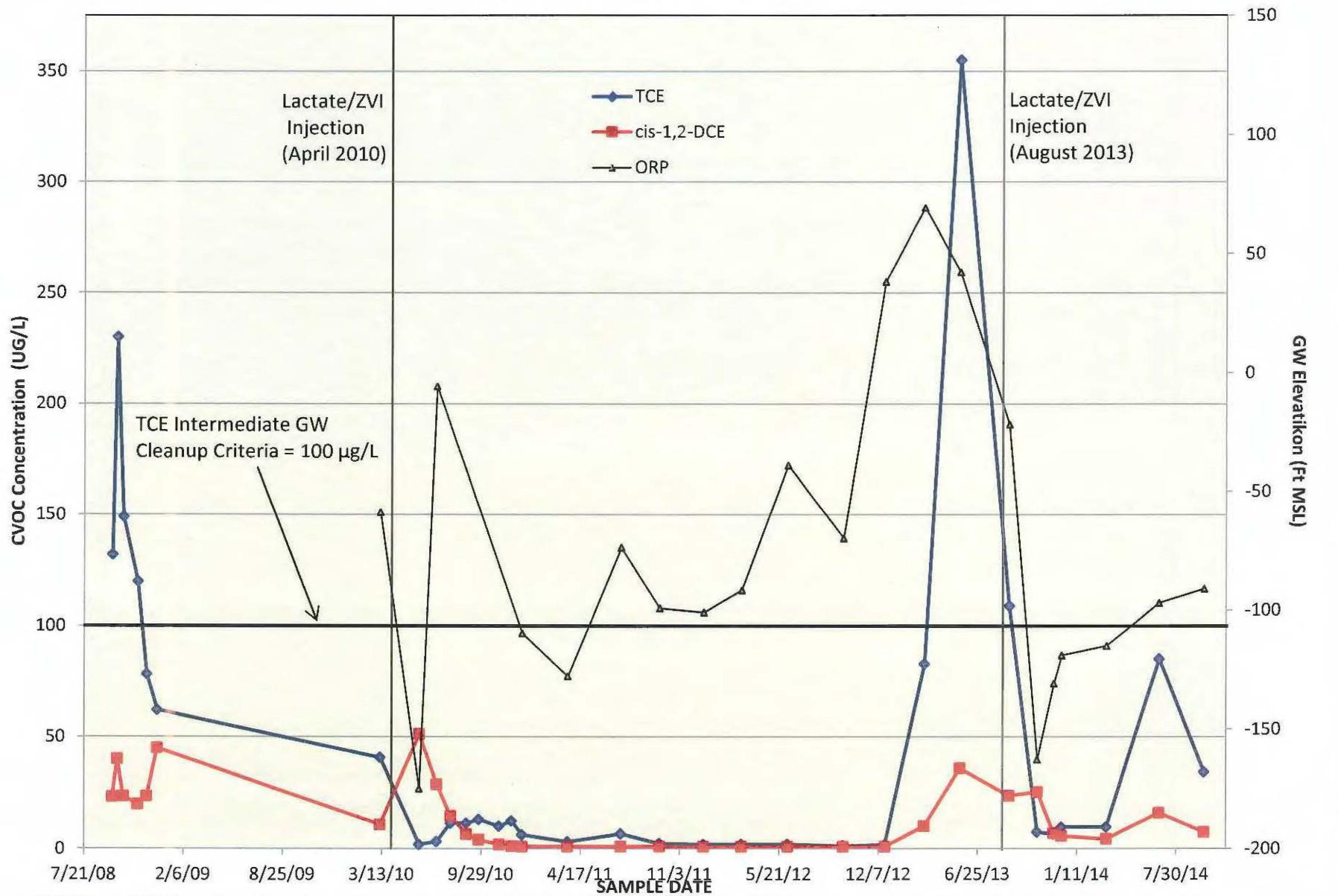


Figure 6
MW-104 CVOC Concentration Trend

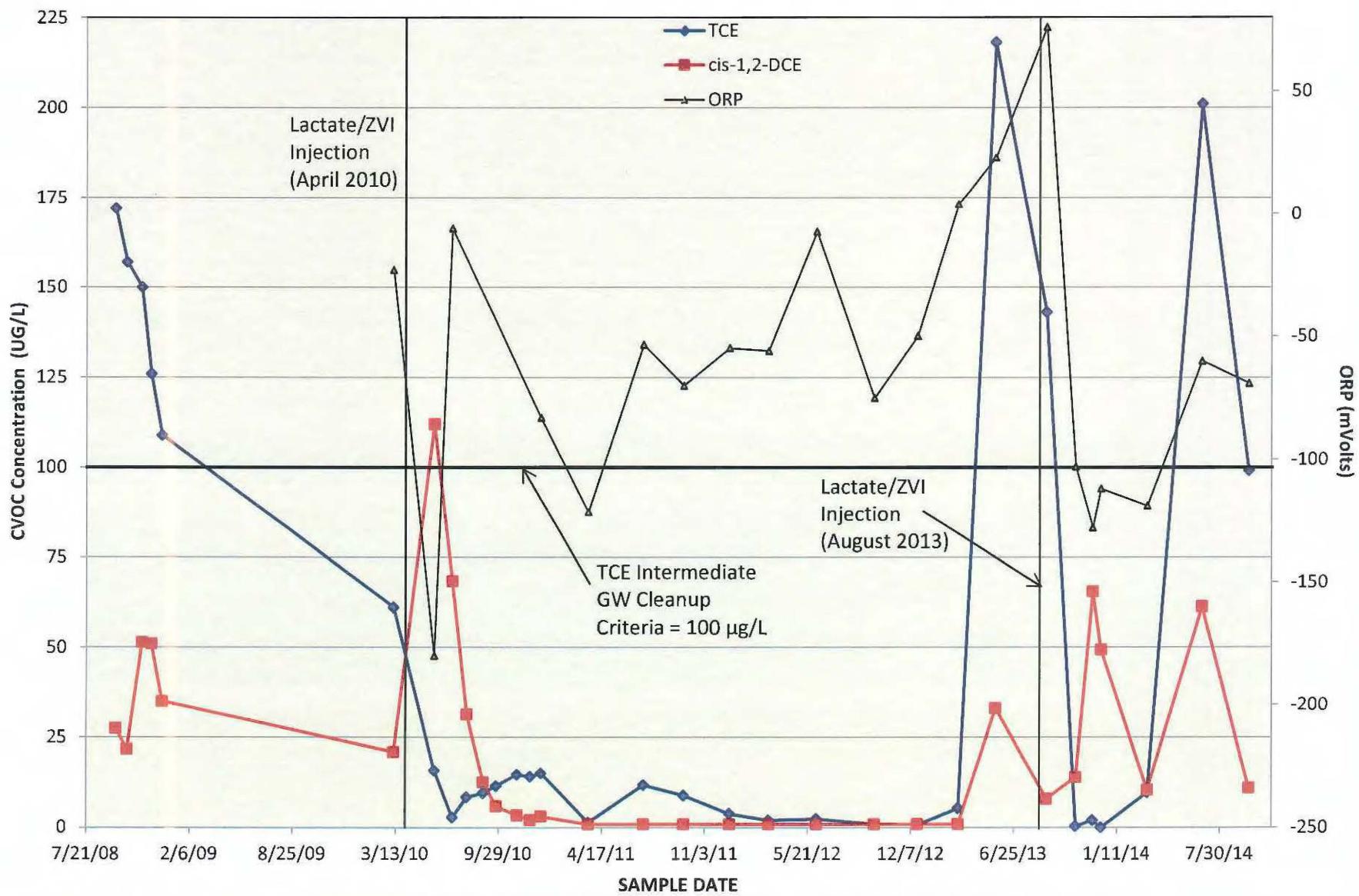


Figure 7
MW-105 CVOC Concentration Trend

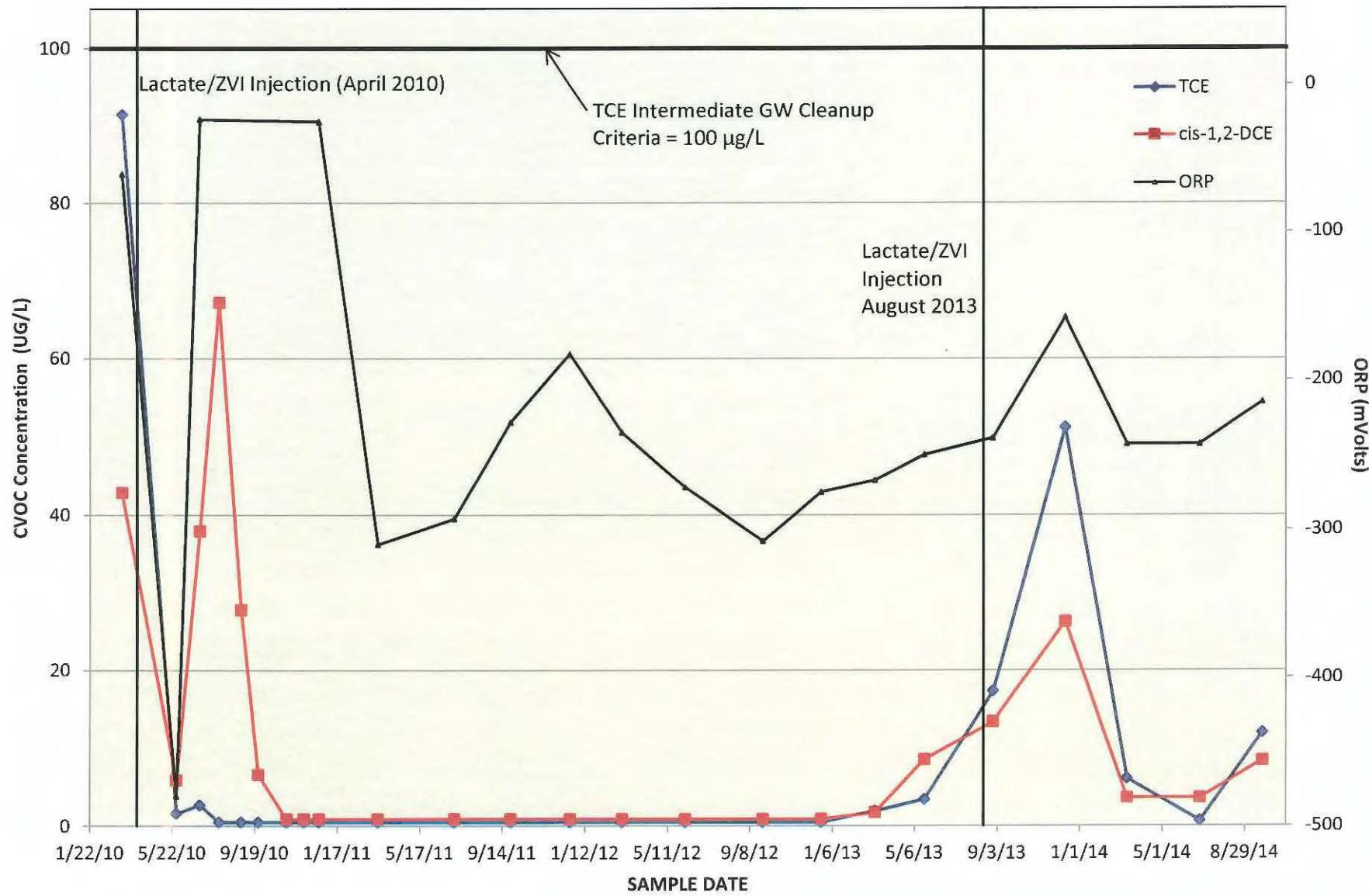


Figure 8
MW-106 CVOC Concentration Trend

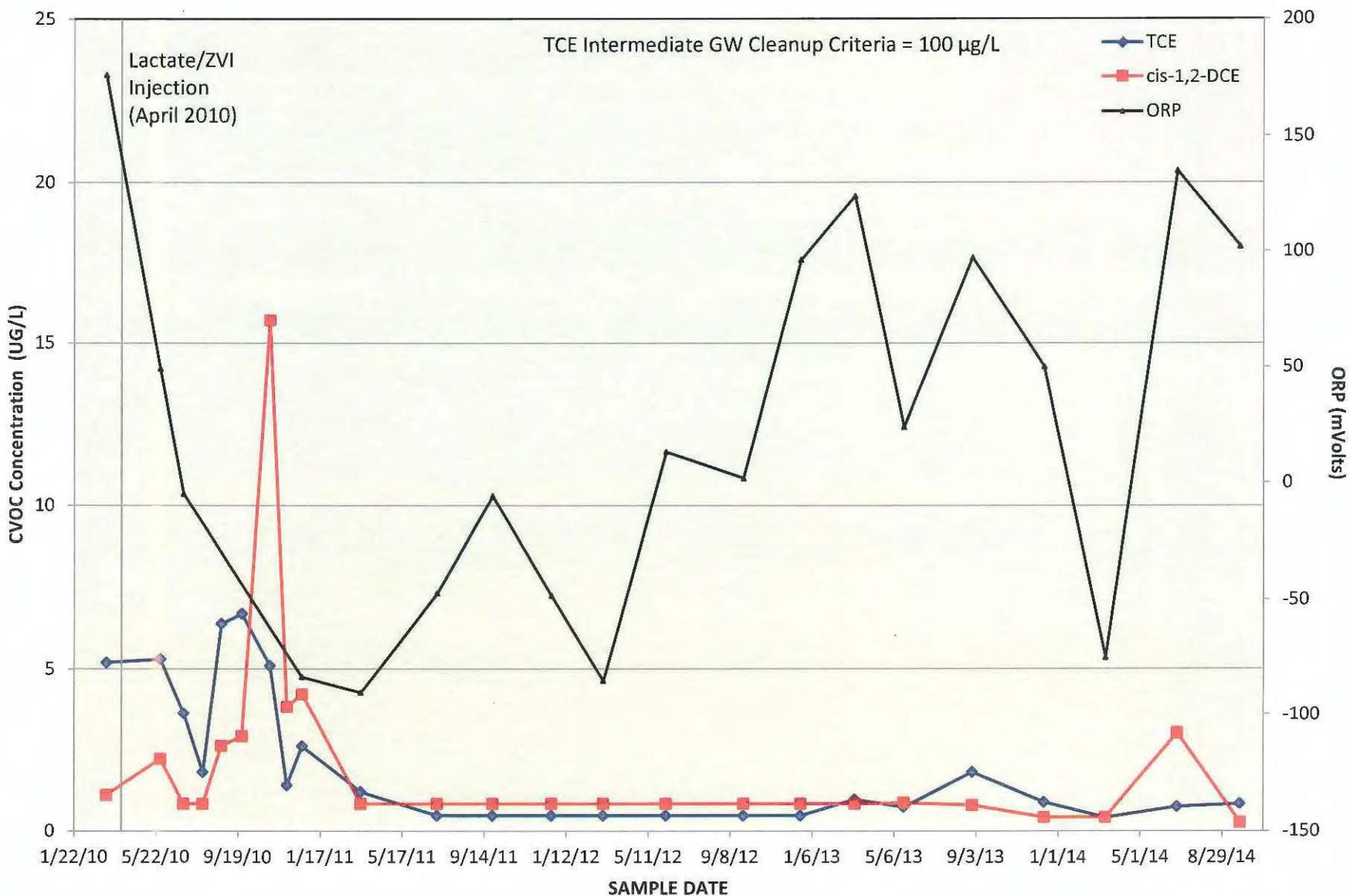


Figure 9
MW-107 CVOC Concentration

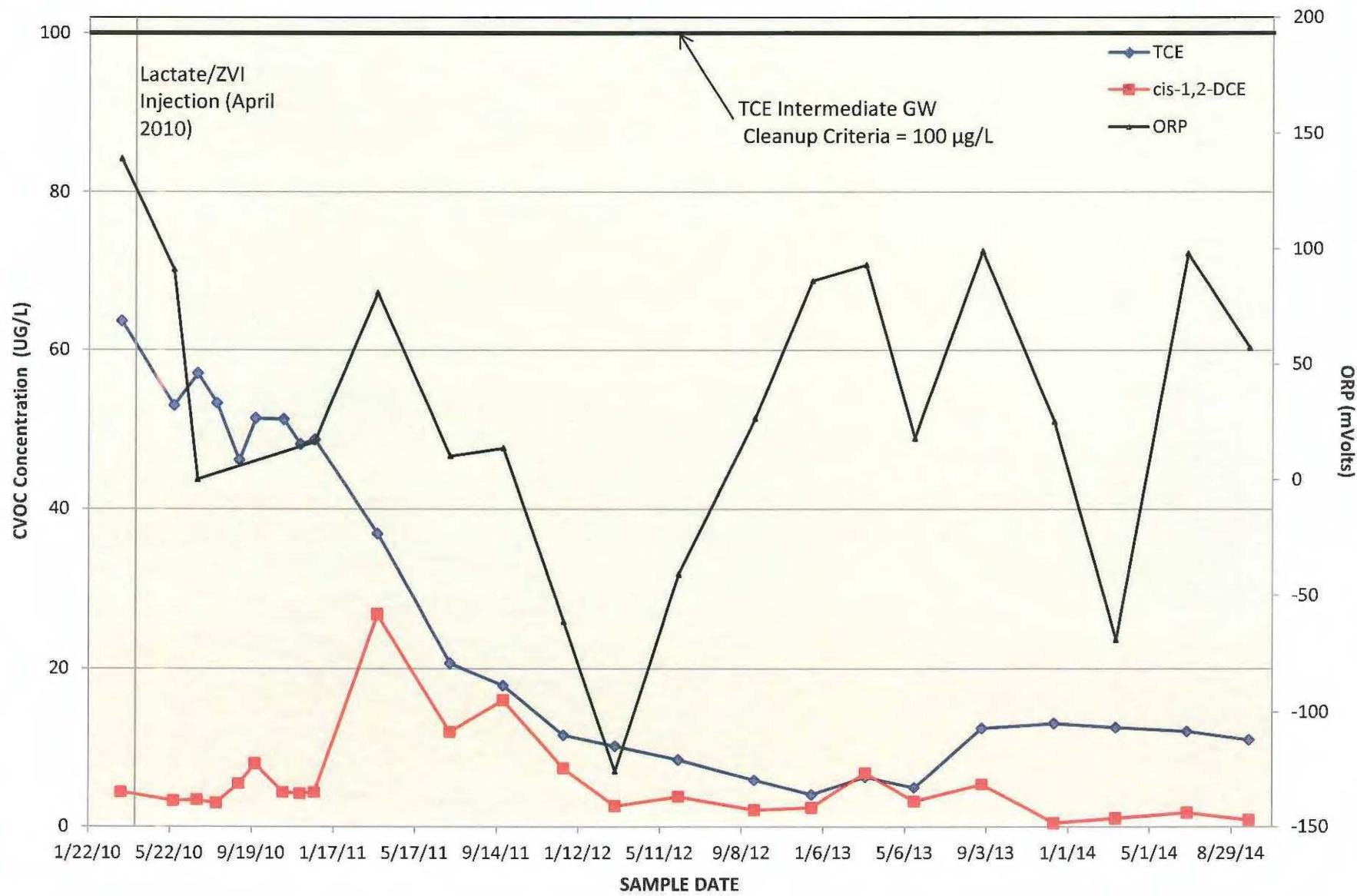


Figure 10
LTMW-01 CVOC Concentration Trend

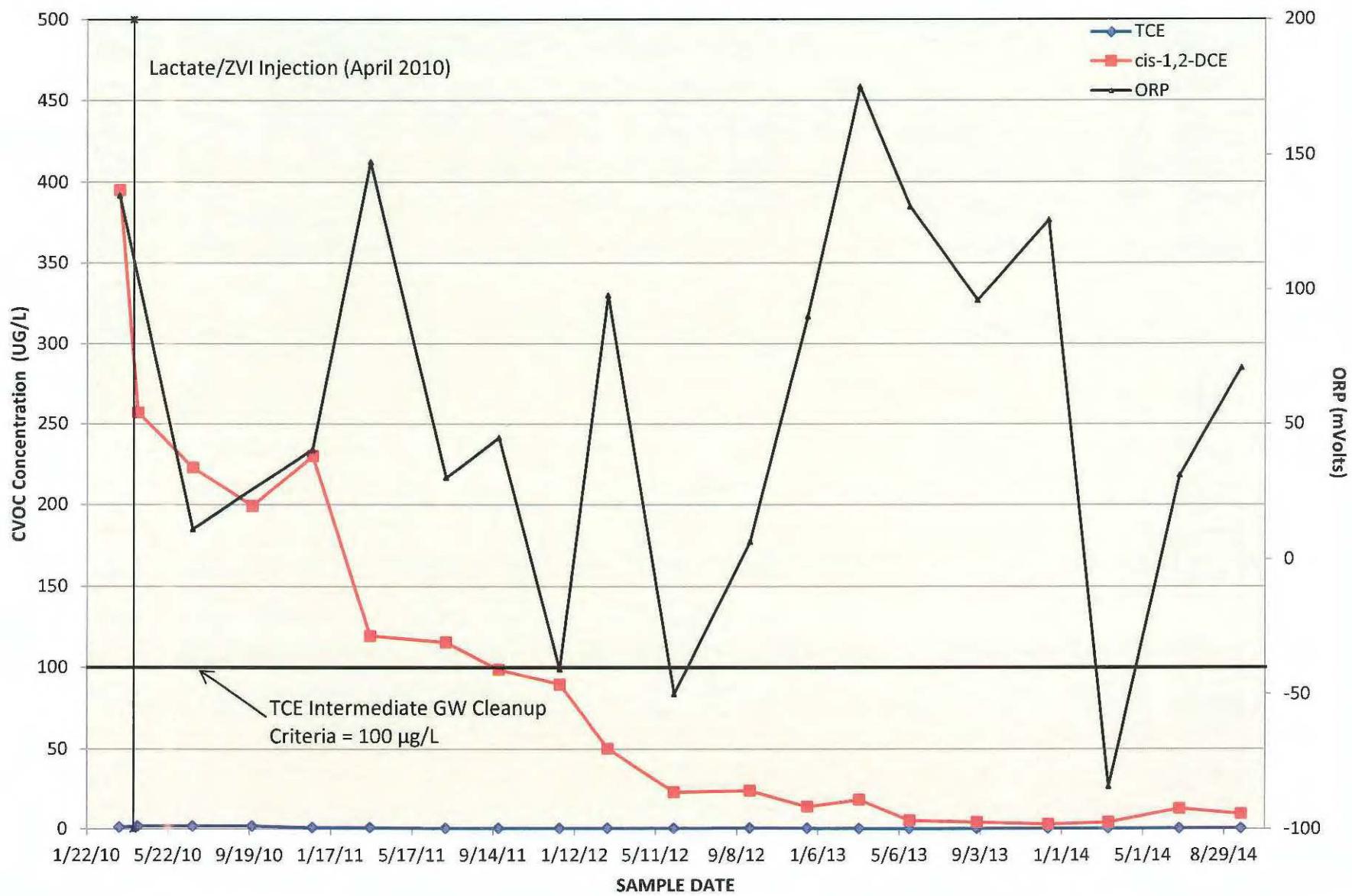


Figure 11
LTMW-02 CVOC Concentration Trend

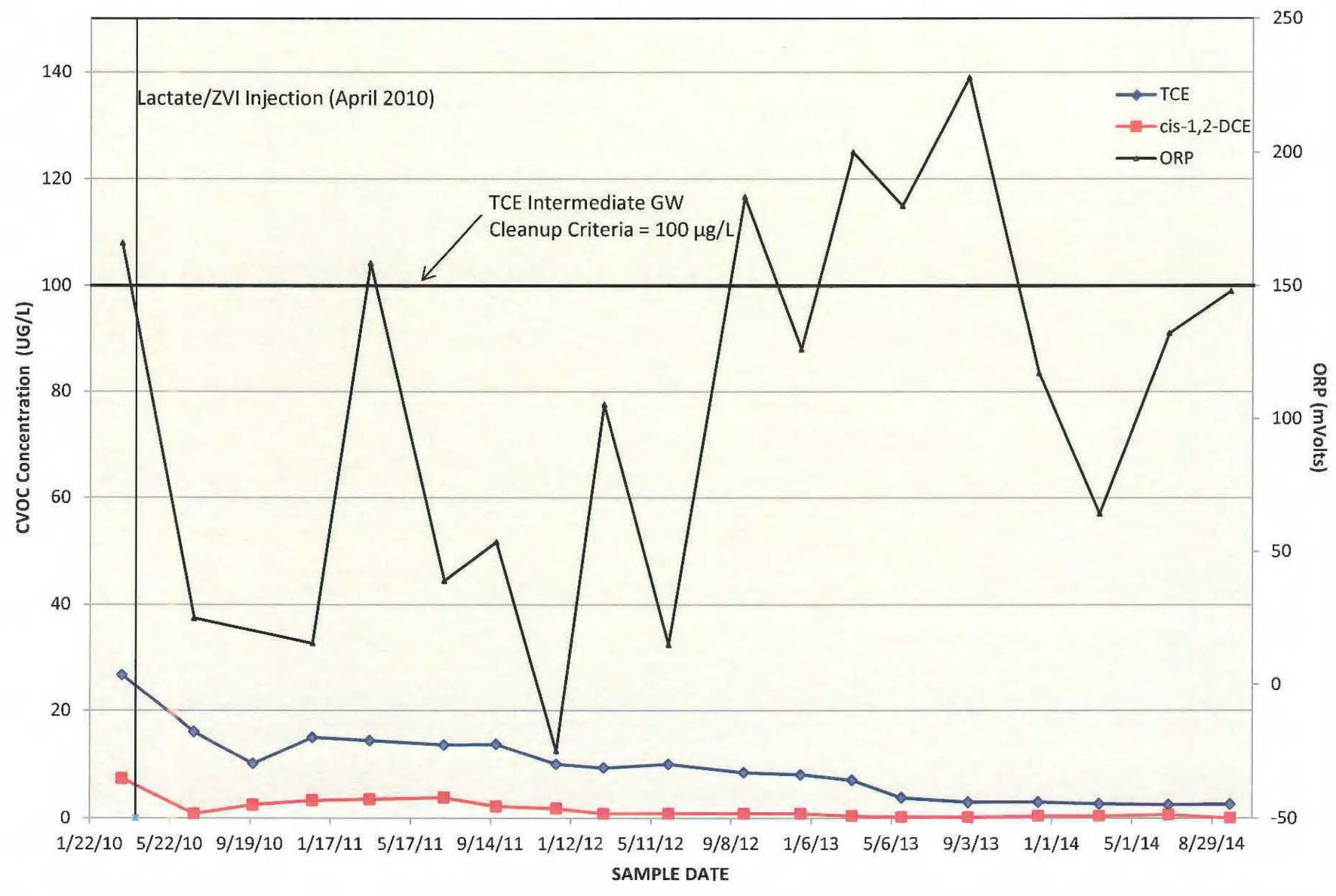


Figure 12
LTMW-03 CVOC Concentration Trend

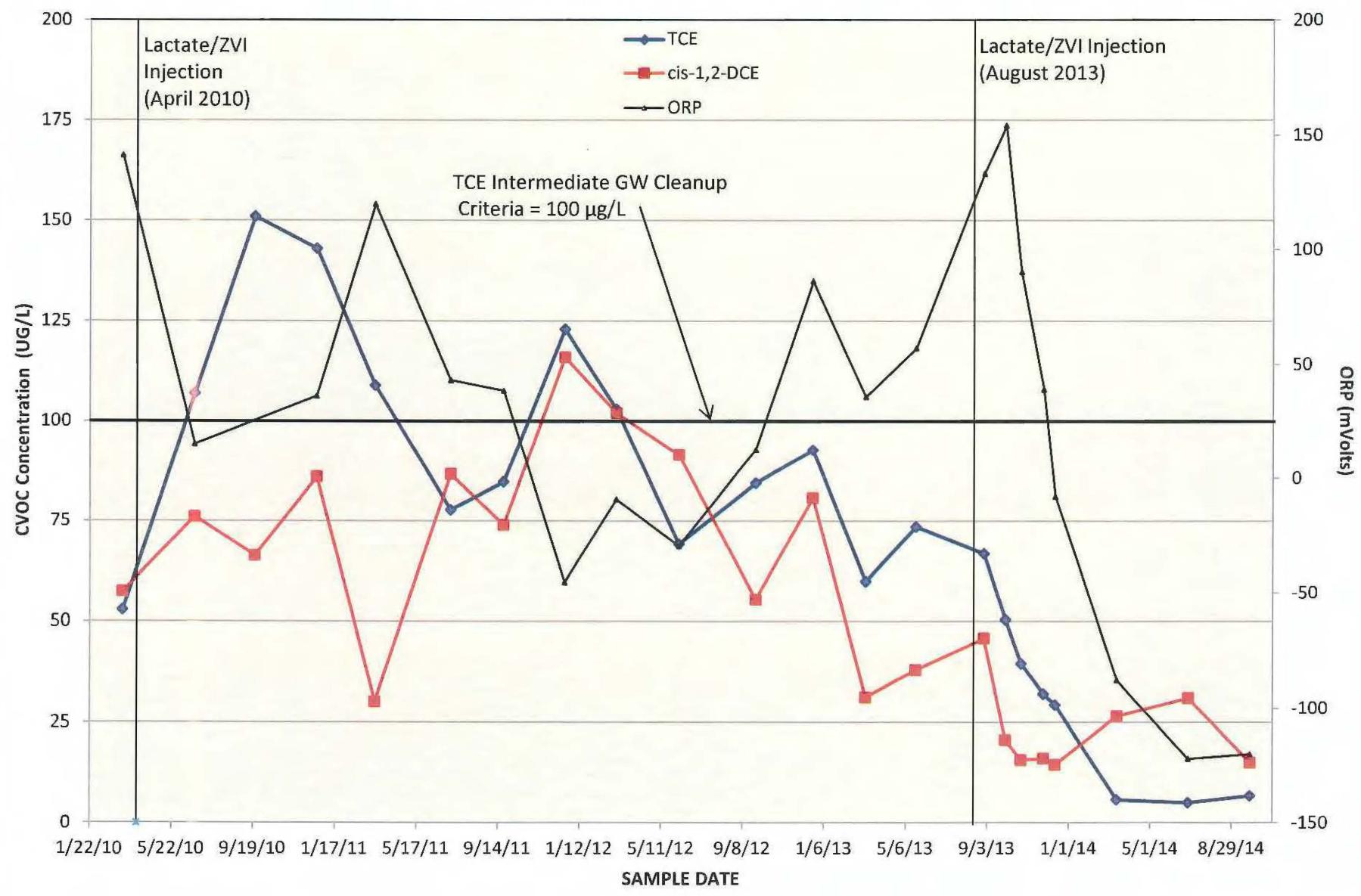


Figure 13
LTMW-03A Concentration Trend

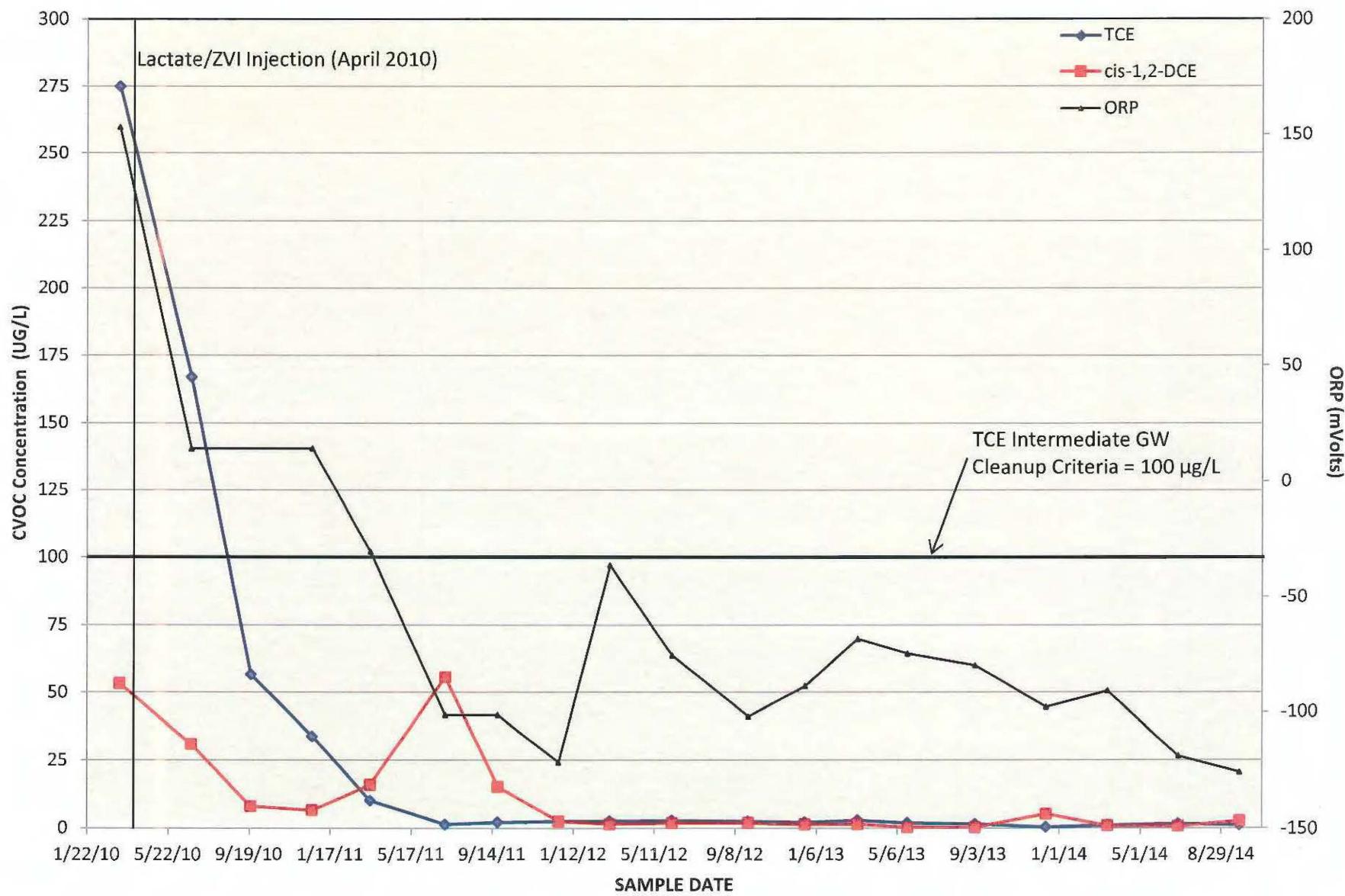


Figure 14
Long Term TCE Concentration Trend at Hononegah Road

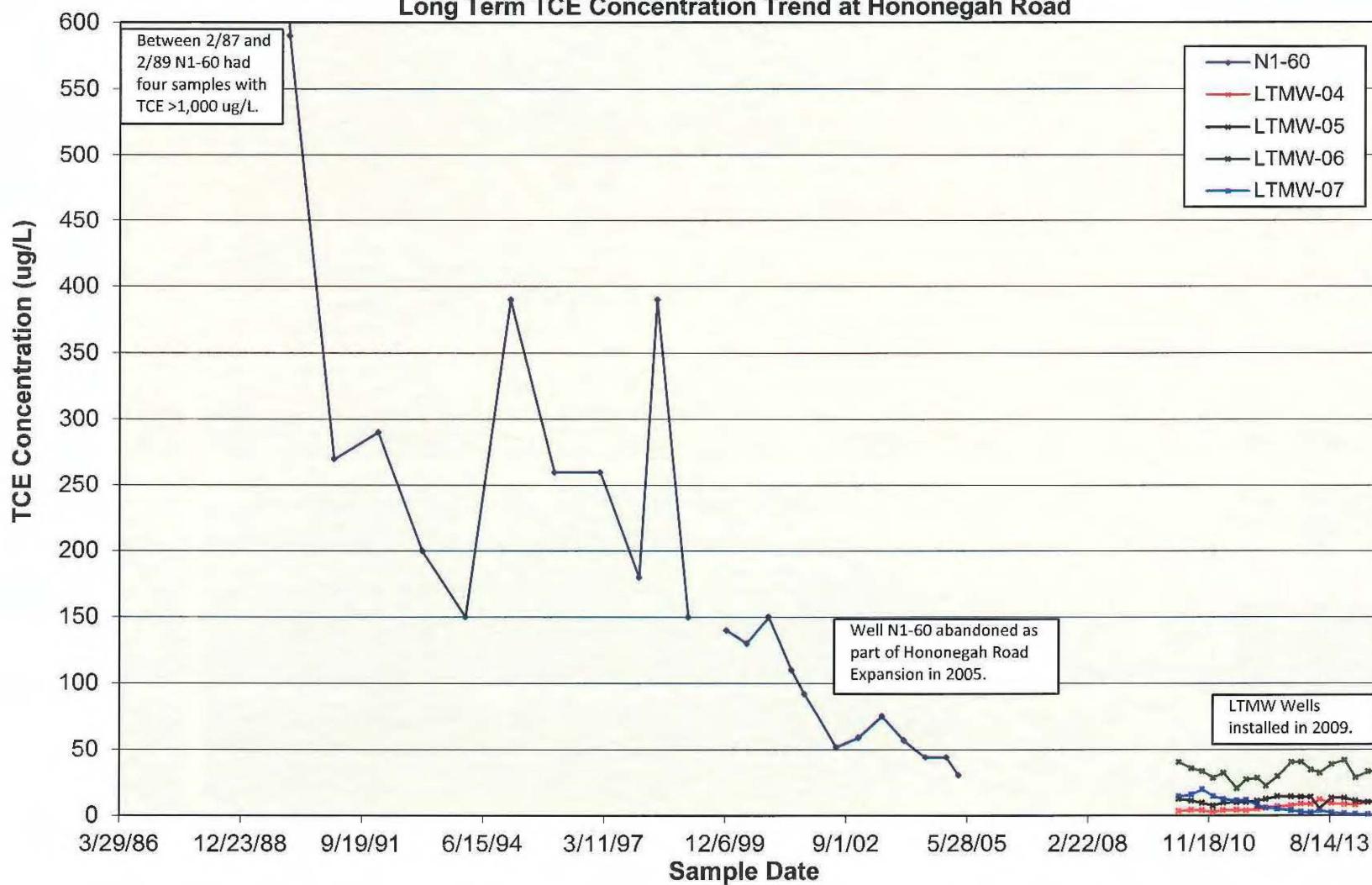


Figure 15
LTMW-04 CVOC Concentration Trend

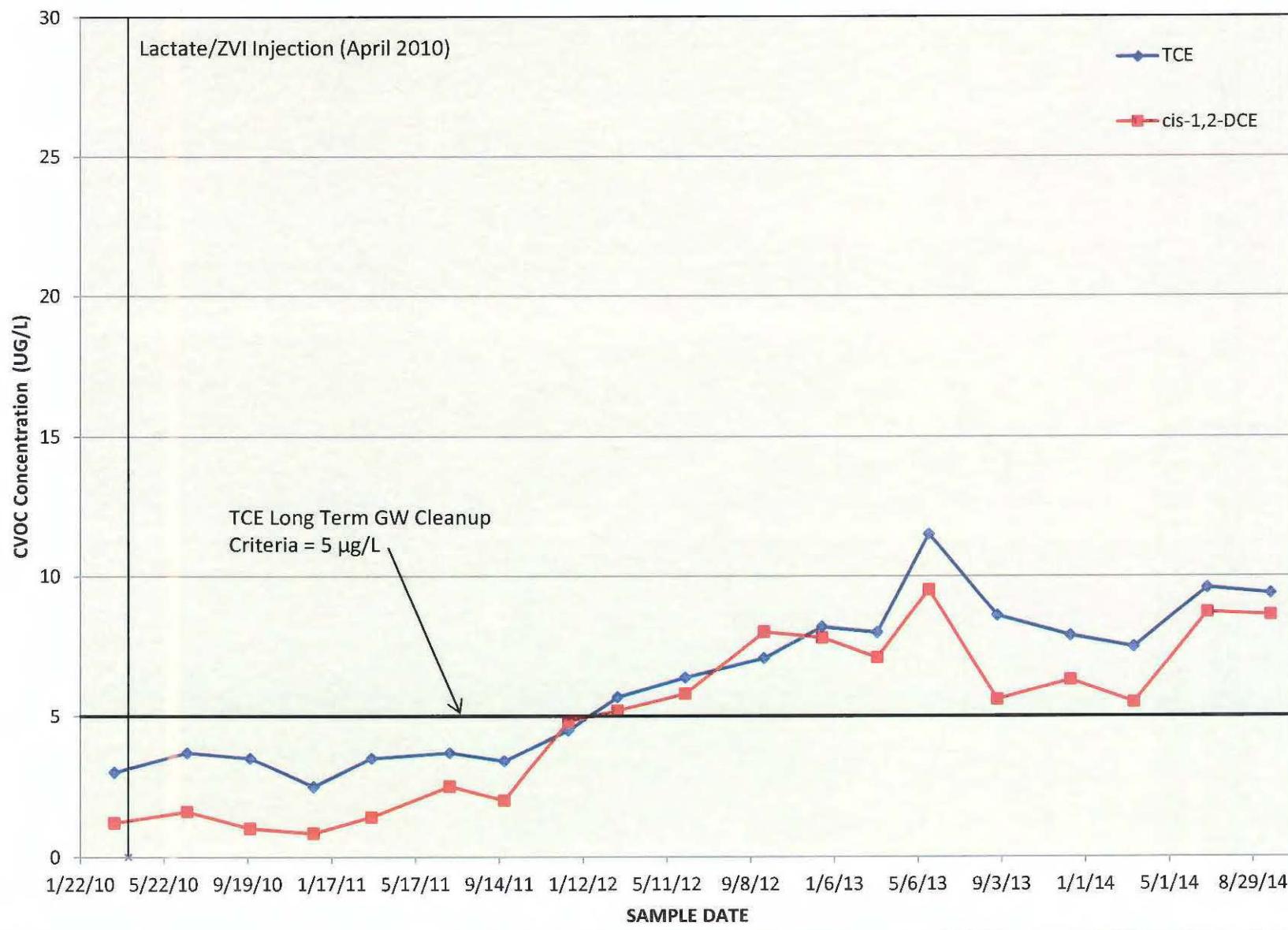


Figure 16
LTMW-05 CVOC Concentration Trend

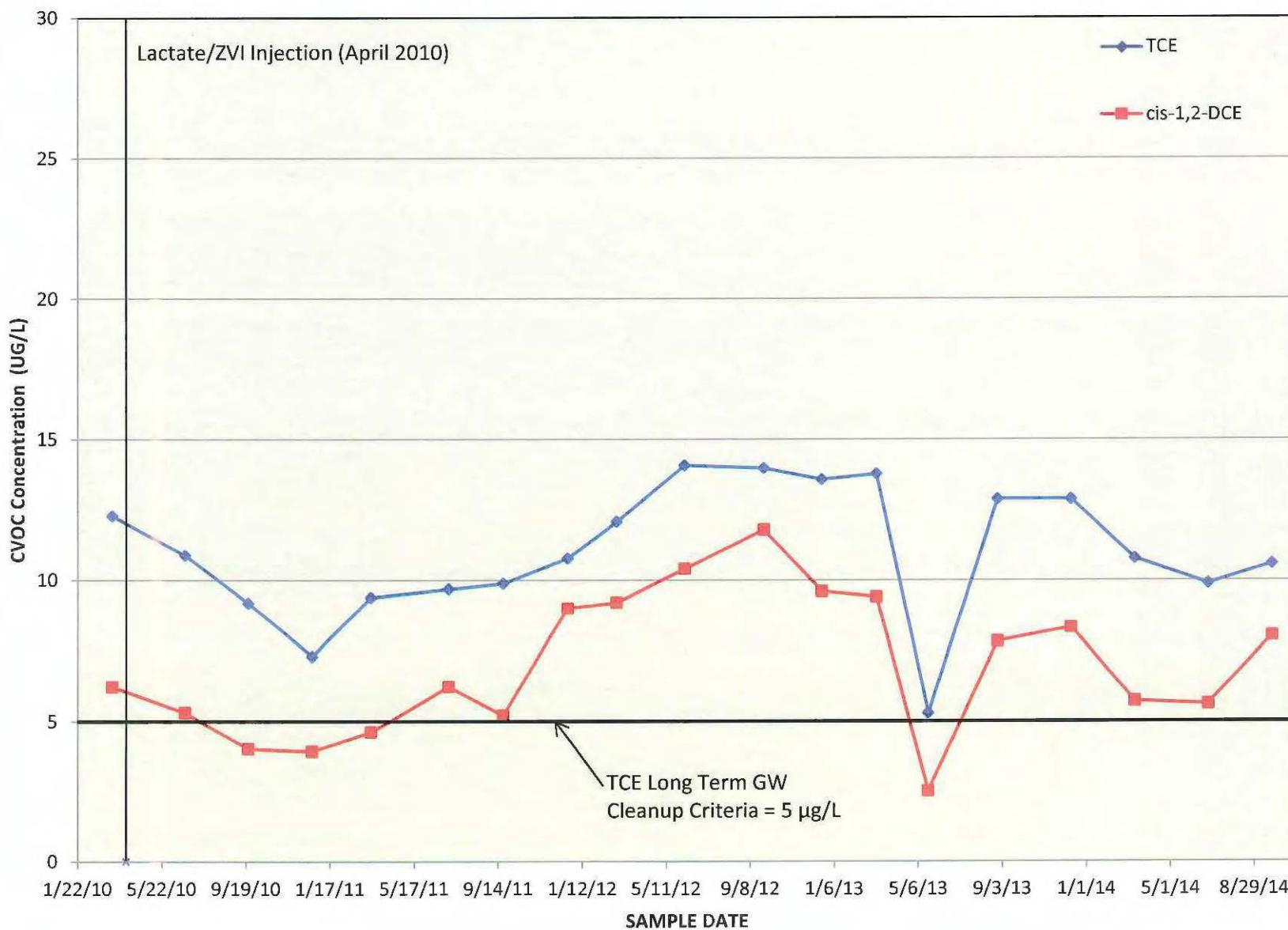


Figure 17
LTMW-06 CVOC Concentration Trend

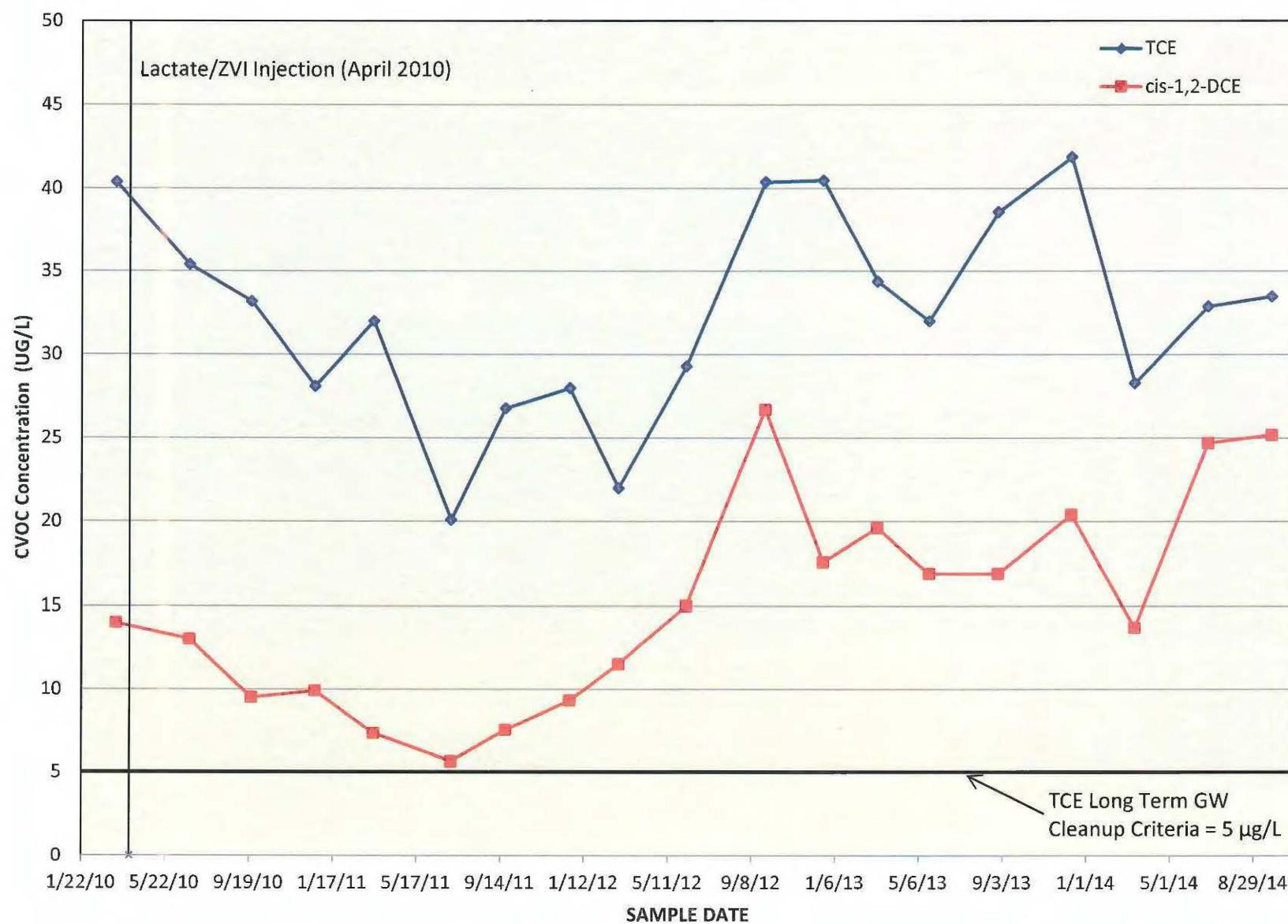


Figure 18
LTMW-07 CVOC Concentration Trend

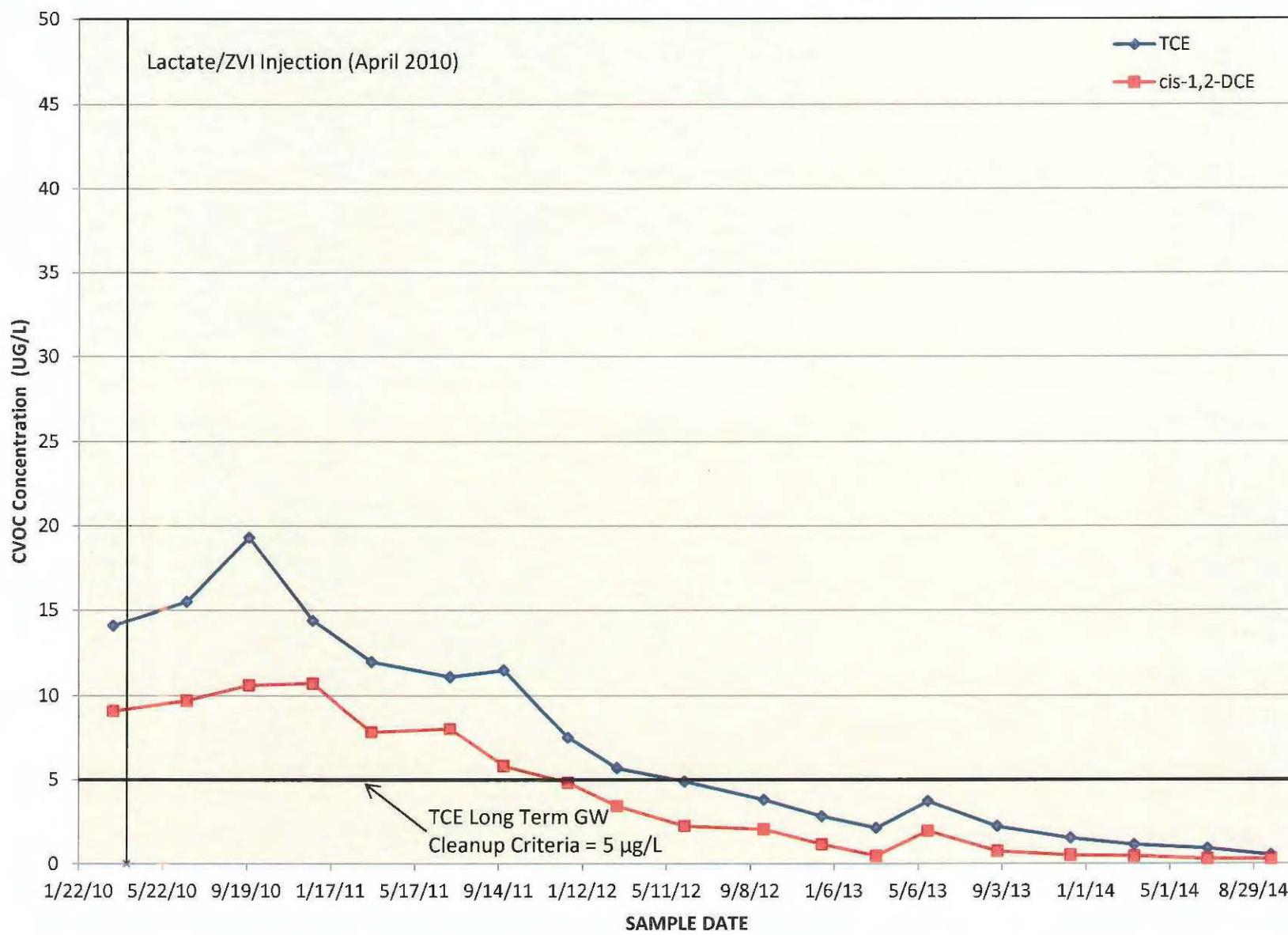


Figure 19
LTMW-08 CVOC Concentration Trend

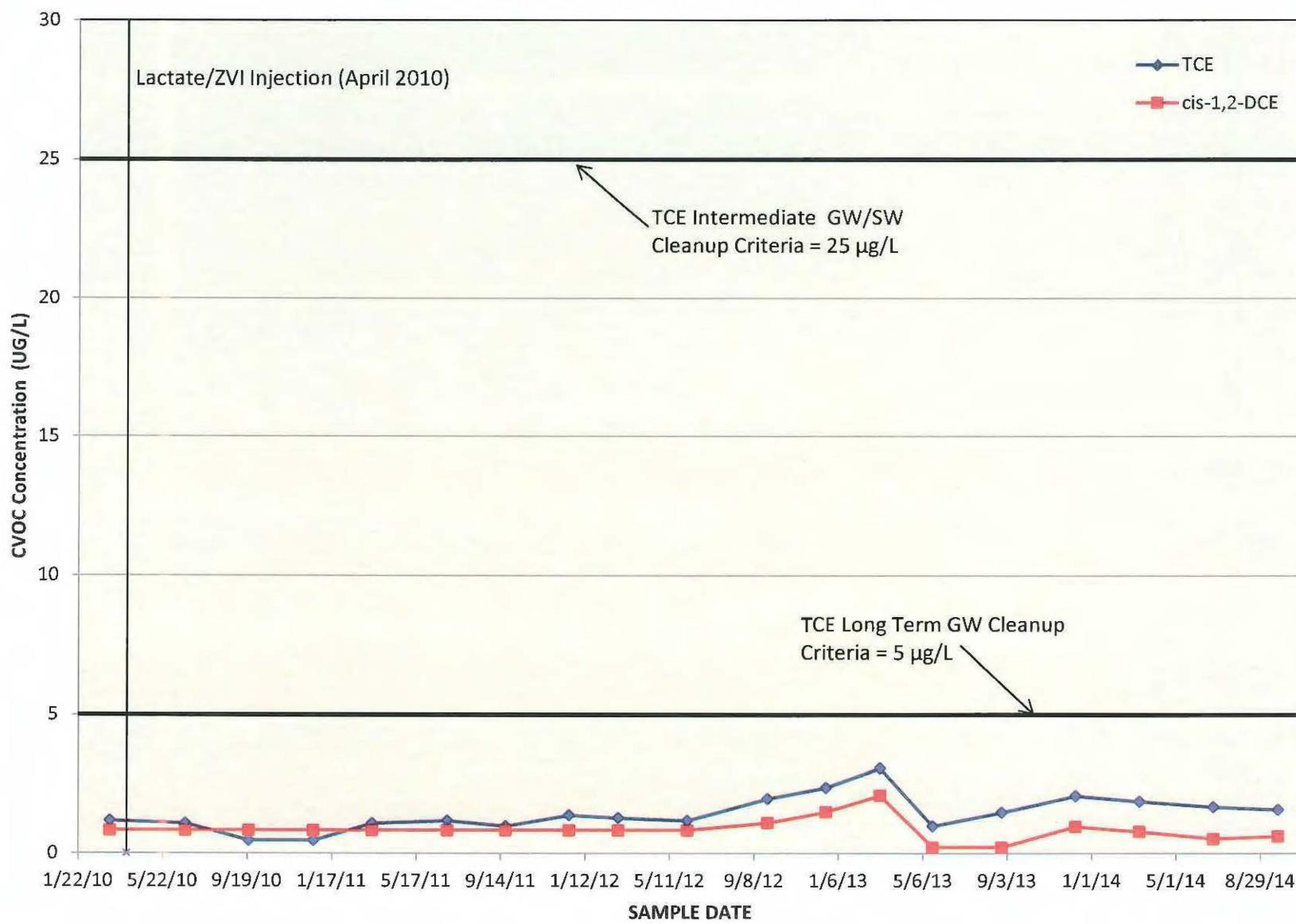


Figure 20
LTMW-09 CVOC Concentration Trend

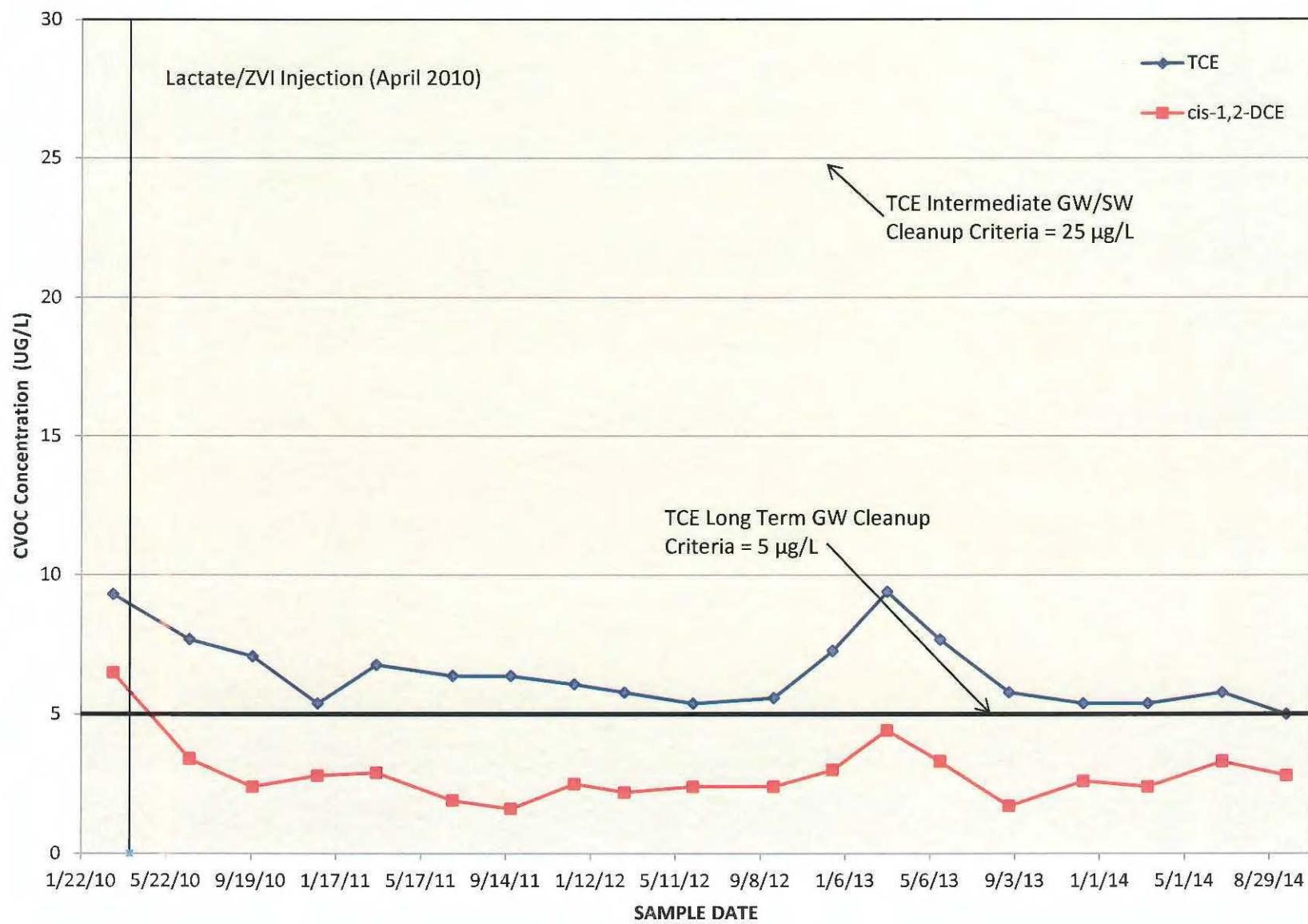


Figure 21
LTMW-10 CVOC Concentration Trend

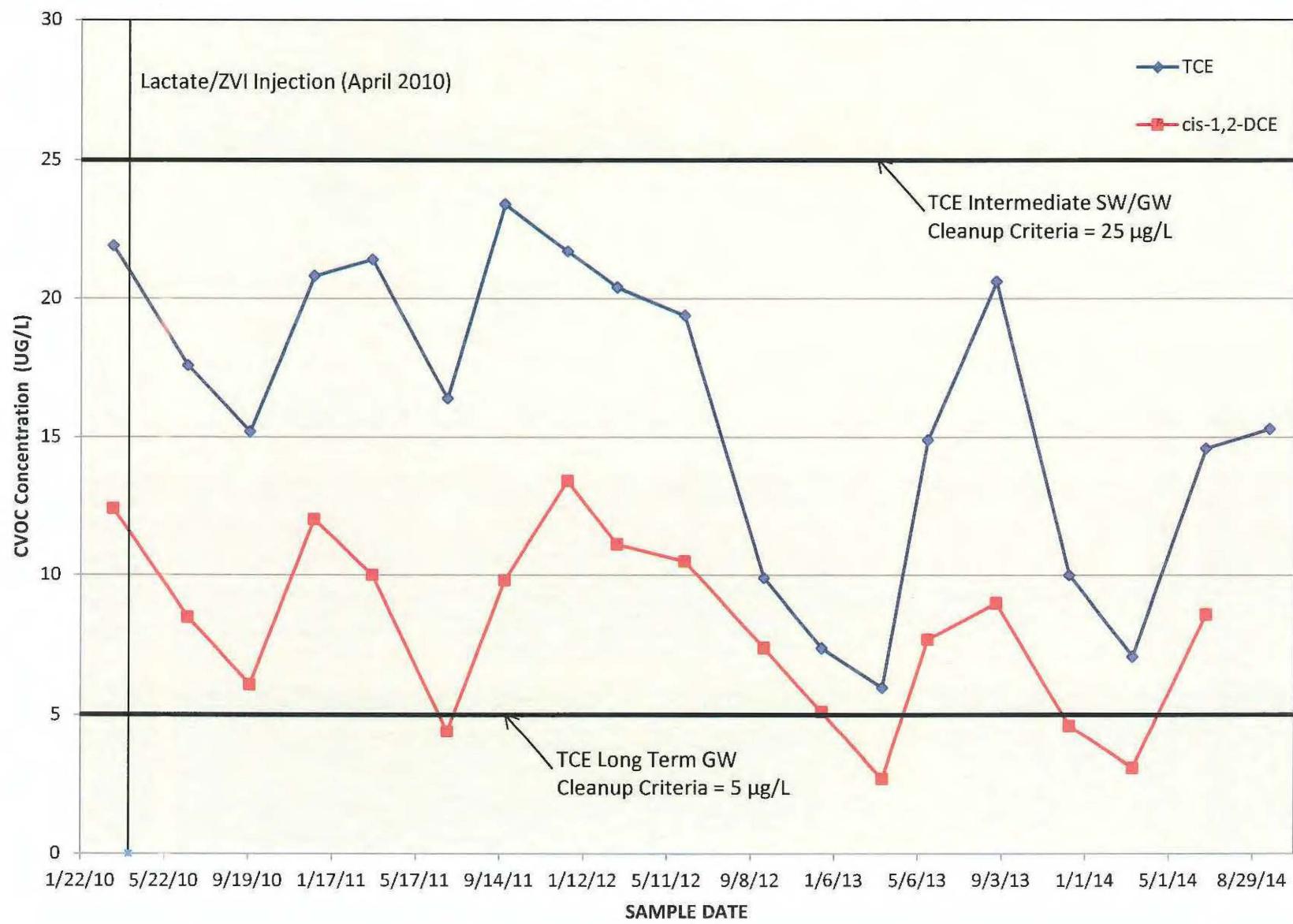


Figure 22
LTMW-11 CVOC Concentration Trend

